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ABSTRACT

Five author contributed chapters explore the social environment of the schools as it relates to mainstreaming handicapped children. M. Reynolds discusses "The Changing Social Environment" in the first chapter. Emphasis is placed on the use of developmental scales in the organization of improved schools. "The Social Integration of Handicapped Students Into the Mainstream" by R. Johnson and D. Johnson examines the rationale for mainstreaming; the processes of making social judgments, accepting, and rejection; self attitudes of the handicapped; and cooperative interaction among and between students and teachers. N. Sprinthall and B. Blum in "Peer and Cross Age Teaching--Promoting Social and Psychological Development in Mainstream Classes" present twelve lessons designed to teach tutoring skills and help tutors process experiences. Suggestions for "Creating Positive Classroom Environments" by R. Hlidek outlines such procedues as group reinforcement and relationship building activities. The final chapter by F. Wood, "Observing Skills for Teachers," deals with the observation of students in complex school environments. (PHR)

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SOCIAL ENVIRONMENT OF THE SCHOOLS

Maynard C. Reynolds,
Editor

What Research and Experience Say to the Teacher of Exceptional Children

ERIC

EC 124 111

CEC

The Council for Exceptional Children

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What Research and Experience Say to the Teacher of Exceptional Children

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About the Authors

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Introduction: The Changing Social Environment

MAYNARD C. REYNOLDS

The nation's schools are undergoing rapid and pervasive changes in the provision of services for handicapped students. The greatest changes are occurring in the student composition of regular classes, in the social climate of classes, and in the reconceptualization of classroom teachers' responsibilities. The purpose of this book is to place these changes in perspective and to provide teachers with the practical information they need to facilitate their new roles.

Generally speaking, the educational placement of handicapped children has been determined historically by society's attitudes toward these children and its conception of the purpose of schooling. Over the past half century, the growing recognition in the United States of the rights of diverse political, economic, ethnic, and social groups was extended, almost inevitably, to the educational rights of children in general and of handicapped children in particular. At the same time, the courts reconceptualized the purpose of schooling as the enhancement of the individual's life. Thus, the isolation of handicapped children on the fringes of society was ended.

Many students with special needs who, in the past, were enrolled in special classes or schools are being returned to regular classrooms where they receive instruction from classroom teachers and supportive services from special educators and other specialists. In addition, the rate of referring exceptional pupils out of regular classrooms, especially in the primary grades, has been lowered substantially in many school districts—an indication that the restructuring of schools is progressing upward through the grades. One of the results of these changes is greater diversity in the characteristics of students in neighborhood schools and regular classrooms.

The changes taking place in the schools stem, for the most part, from the application of the principle of the "least restrictive environment." The intent of this principle is to maintain children in natural settings (i.e., familial home, known neighborhood, and regular classroom), or in settings as close to natural as is optimal for the children, where the greatest opportunities for educational and social development are present. Thus, when a pupil is discovered to need specialized instruction or supportive services, the first and preferred response is the delivery of the help in the natural environment so that the child's life is disrupted as little as possible. Only in unusual circumstances is a child removed from the regular classroom, the school attended by his or her siblings and neighborhood peers, the neighborhood itself, or the family. Any educational placement other than the natural one is made only if it offers the child greater advantages and opportunities for personal development. The principle has been stated and restated by the courts and is made explicit in Public Law 94-142, The Education for All Handicapped Children Act of 1975.

A consequence of the application of the least restrictive environment principle has been greater complexity in the schools' social environment. The effects of this complexity impinge upon regular classroom teachers, special educators, and students—both handicapped and nonhandicapped. In the past, teachers tended to expect and to create homogeneous groups of pupils for instruction. They were not prepared to manage curricula or instruction in classrooms with highly heterogenous populations. For many of them, consequently, the increase of pupil diversity was both difficult and disturbing.

The homogeneous classroom extended the concept of an instructor at one end of a log and a student at the other end. Children were seated in orderly rows and columns facing the teacher at the front of the room and were disciplined to work in silence and to ignore the classmates around them. The failure to observe silence usually was classified as "disturbance" and sometimes as "cheating." Not all classrooms are so grim, of course, but many are so structured that they provide a stilted and unnatural environment. The teachers and pupils accustomed to such a restricted social climate are ill prepared for the inclusion of handicapped pupils with diverse needs and behaviors. Obviously, the full and healthy realization of programs founded on the least restrictive environment principle depends as much upon the receptivity and contributions of students as upon the skills and accommodative capacities of teachers.

The trend toward more inclusive social arrangements is not unique to the schools. A similar trend is evident in all institutions of the community, beginning with families. Increasingly, they are keeping their handicapped members in the home rather than sending them off to residential schools or institutions. Buses, bowling alleys, churches, places of employment, and all other social settings are opening to handicapped persons as well. Under Section 504 of the Federal Rehabilitation Act (as amended), all agencies receiving federal funds are required to redesign those policies, procedures, and facilities that may have been responsible for preventing the participation of the handicapped. Although attention is given mainly to the schools in this publication, the accommodation of handicapped persons in "regular" environments challenges all of society; it is not a narrow problem just for educators.

THE INDIVIDUAL AND THE GROUP

The current imperatives to serve handicapped persons place an extraordinary emphasis upon the individual. For example, Public Law 94-142 requires teachers and other educators to plan and write out individualized education programs (IEP's) for each handicapped student, and to negotiate each IEP with parents and/or the student himself or herself. The IEP's must be based on individualized assessments and state goals and objectives to be achieved within a definite time frame. It is notable how far these procedures go in emphasizing accountability to individuals.

This extraordinary emphasis upon the individual could easily be seen as a kind of absorption in the self, an excess of egocentrism in our society. The strong tendency to claim individual rights and privileges sometimes seems to neglect social values, the common good, or a true sense of community.

In fact, however, personal (individual) fulfillment is possible only when there is a decent level of concern with and fulfillment of social objectives as well. Handicapped children will be served well as individuals when a high sense of community is achieved in the classrooms and schools of the nation. Teachers accommodate *all* children as individuals to the extent that they are able to produce behaviors that are socially oriented as well as egocentric. One hopes that all students will be well served as individuals throughout their school years and that they will learn to share in the responsibility to serve others. They need to learn to take personal responsibility not only for themselves but also for the social environments in which they function.

Teachers are in the position to influence the development of their students from highly egocentric toward more socially oriented behavior. The movement to accommodate handicapped students in regular classes makes such development an urgent matter of concern. The purpose of this book is to assist teachers in the task by outlining our knowledge base for the topic and some of the practical procedures that may be helpful. To the extent that teachers are able to encourage students to achieve the sense of community, feelings of responsibility for the environment, and awareness of the rewards of group life, they will have helped to solve one of the major and growing problems of our society: the excessive demands for individual rights as opposed to shared responsibility for the community.

Given the changes in the school provided for handicapped students, which are having general and even profound effects on the structure of schools, the roles of school personnel, and the relations between schools and families, trying to envision what the schools of the future may be like is an interesting exercise. "Imaging" the school of the future is a necessity if we are to be clear about what it is we are trying to achieve.

In a somewhat broader context than this chapter (Reynolds & Birch, 1978), I tried to describe the school of the future, in particular, the school that is emerging in accord with the principles of Public Law 94-142. The format for this discussion was 16 rating scales in which the peak development represents the image of the school as it ought to be where there is full compliance with the spirit as well as the letter of the law. The scale format grew naturally out of the answer to the question, "How can we get there from here?" Thus, the scales are developmental in nature in that they offer teachers and other school personnel the means of organizing their efforts for programmatic improvement and personal growth.

Three of the scales that correspond to the topics covered in the following chapters are reproduced here.* The first focuses on the social environment of the school. It suggests that many schools today are at level 1, the lowest rating level, in which egocentrism is the main characteristic, in contrast to level 5, the highest level, that stresses social development. The achievement of the social environment at level 5 requires new elements in teacher competencies, particularly those that are specified by Johnson and Johnson in Chapter 2. Many of the ideas and practices discussed by Sprinthall and Blum in Chapter 3 also are highly relevant.

There is no way to successfully accommodate students with special needs in regular school programs until teachers are able to provide leadership for and students learn to cooperate in creating an accepting, helpful social environment in which individual differences are expected and appreciated.

The second scale included here is "Control of and Responsibility for Environment." It emphasizes student participation in the general governance of school operations. The necessary experience is acquired through graduated levels of increasing influence and control, with attendant responsibilities, in policy making and administration. As students learn to take such controls and responsibilities, disruption, vandalism, and inattention to school tasks can be expected to be reduced.

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*For a discussion of the earlier version of the scales see Reynolds & Birch (1978). Copies of the scales can be obtained from M.C. Reynolds, 349 Elliott Hall, University of Minnesota, Minneapolis, Minnesota 55455.

Social Environment Scale

____ 1 Students are expected to work essentially alone as far as instructional tasks are concerned. Student-student relationships tend to be nonsharing, even competitive. The teacher rewards individual performance and seems nondeliberate about group processes.

____ 2. Students work mainly in isolation, but occasionally in small groups. The teacher praises and supports friendly interactions, but no systematic provision for education in group processes is provided. Evaluation tends to be individually oriented and to encourage competition.

____ 3. Students work in small groups frequently and must share materials. All records are individual. Students are expected to learn to work with each other, but goals are nonspecific.

____ 4. Students are clustered so that they can interact freely. Some group projects are assigned with considerable frequency. Group projects are evaluated informally, but grade records emphasize individual achievements. Social skills are valued.

____ 5. The development of positive social skills and attitudes is one avowed objective of the teacher. Students are expected to interact and share with each other and to help one another. Sometimes they work on group projects, dividing up work. The teacher assists in group process and rewards effective group work. Students have every reason to be mutually helpful. Definite efforts are made to provide socially integrative experiences for exceptional students.

The third scale, "Affective Education," is based on the idea that the management of affect in the classroom and in interactions with fellow professionals is an important and necessary skill for every teacher. Children need to think well of themselves, to trust their teachers and classmates, and to feel genuinely wanted in school situations if they are to achieve well and to develop constructive attitudes toward society. All these attributes depend upon caring and skillful teachers who can systematically create healthy emotional environments. The attributes are no less important in adult-adult relationships. The following chapters deal with affect in one way or another but the suggestions of Hlidek in Chapter 4 are especially relevant.

The final chapter by Wood (Chapter 5) deals with the observation of students in complex school environments. Probably no other skill is more important to the teacher than careful observation because all that he or

Control of and Responsibility for Environment Scale

____ 1. Each individual class and the school is a rule governed operation, with rules based almost totally on the teacher's "police" power and competencies.

____ 2. Students share occasionally in discussion of how the school environment shall be managed. A degree of "consent of the governed" is achieved.

____ 3. Formal arrangements are made for the regular involvement of students in governance — as in student government, student management of classroom materials, weekly class meetings, or the like.

____ 4. Individual students and groups of students are given special training and responsibility for management of much of the school environment and processes. Included are technical matters such as running audiovisual machines, administering of competency exams, orienting new students, and showing the school to visitors. In addition, training may be included in counseling skills (listening, reinforcing, etc.) and other aspects of interpersonal and group behavior.

____ 5. Students share significantly in the governance (policy making and administration) of their classes and school. Their obligations run to other students as well as to school officials; they are expected to help make the learning environment productive. They receive instruction where necessary to help them take responsibilities. The teacher shares in all of this as well, but gives particular attention to instruction for constructive initiatives and "autonomy" by students.

she knows about principled approaches to teaching depends upon accurate assessment of the behavior of students, including the changes that occur as circumstances are varied. As teachers increasingly find themselves involved in case conferences on individual pupils—to write IEP's or for other purposes—new demands will be created for careful, dependable observational data.

When Samuel Johnson published his *Dictionary of the English Language* in 1755, he recognized the difficulties of standardizing the spelling and definitions of words. "Change," he wrote in the Preface, "is not made without inconvenience, even from worse to better." The observation holds true for all innovations. It seems to be characteristic of most people—and, perhaps especially children—to prefer the certainties of the status quo. Anyone who tries to change practices and

Affective Education Scale

____ 1. Concern for affective development and climate is limited to a general policy of courtesy and pleasantness. Affective education is in no way a planned part of the curriculum.

____ 2. Positive affective development and climate, while recognized as worthwhile, are sought only through sporadic and generally nonsequential activities included on an impulse or "time available" basis.

____ 3. Affective education is recognized as worthwhile and is included on a planned but infrequent basis throughout the year. Teachers have opportunities for inservice education and consultation on the topic.

____ 4. Affective education is recognized as worthwhile and is included on a regularly scheduled basis much as other subject areas are in the weekly instructional schedules for students. Needs of teachers and administrators are recognized as well.

____ 5. Affective education is recognized as an essential component of the total curriculum, is a part of the regular daily instructional schedule, *and* is systematically included in carry over activities in all subject areas. Administrators and teachers attend equally to professional colleagues' affective needs. Expert consultation is provided on affective education to both teachers and administrators.

behaviors must be prepared to act consistently and optimistically. Far too many innovations that have held great potential have been rejected because they did not produce desired effects in unrealistic short periods. Indeed, there is a great danger that the potential of mainstreaming itself may be nullified if insufficient effort and time are given to carrying out its intent. The social and psychological classroom practices advocated by the contributors to this book are essential to realizing the benefits of Public Law 94-142 for all handicapped children and, perhaps more important, to enhancing the psychosocial development of all children. Many teachers will find the references listed at the end of each chapter a source of additional and more detailed information on the practices; other teachers may want to participate in workshops and training experiences to develop needed skills.

I am pleased to have a part in presenting the work of my close and respected colleagues at the University of Minnesota and the St. Paul Public Schools. Many of us regard teachers as important architects of the future. Thus, if teachers are more knowledgeable about and skillful in the domains that are discussed in this book, their tasks will be easier and their products will be sounder; then children, and particularly children with special needs, will be better served.

REFERENCE

Reynolds, M. C., & Birch, J. W. *Teaching exceptional children in all America's schools.* Reston VA: The Council for Exceptional Children, 1978.

The Social Integration of Handicapped Students Into the Mainstream

ROGER JOHNSON
DAVID W. JOHNSON

At the door of the classroom Carl stopped and glanced anxiously at the busy hum of students clearing their desks in preparation for math. The special education teacher escorting Carl to the classroom turned and looked intently at the child, a trace of anxiety appearing on her face also as she took Carl by the hand and entered the classroom. Carl unobtrusively slipped into a desk at the back of the classroom as the special education teacher chatted for a moment with the regular classroom teacher.

Will I be liked? Will I be rejected? Will other students ignore me? These are questions that Carl is asking himself. Such questions are at the heart of successful mainstreaming—the integration of students with intellectual, emotional, and physical handicaps into the regular classroom.

For the past several years we have been investigating procedures regular classroom teachers can use to insure that mainstreaming is a success. We began with three assumptions: (a) that it is unfair and unrealistic to ask regular classroom teachers to become experts in special education; (b) that any teaching strategy implemented in the regular classroom to facilitate the integration of handicapped students should benefit the education of all students, not just those with special learning needs; and (c) that building positive relationships between handicapped and nonhandicapped students is the first priority of mainstreaming. *It is when handicapped students are liked, accepted, and chosen as friends that mainstreaming becomes a positive influence on the lives of both handicapped and nonhandicapped students.*

Why is the integration of handicapped students into the regular classroom taking place? The purpose is to structure the classroom learning in such a way that

1. Friendships are formed between handicapped and nonhandicapped students.
2. The social skills of all students are promoted.
3. The self esteem of all students is enhanced.
4. The achievement of all students is maximized.

Sound great? Can it be accomplished by just placing handicapped students in the regular classroom and letting life proceed as always? *No, it cannot.*

Placing handicapped students in the regular classroom is the beginning of an opportunity. But, like all opportunities, it carries the risk of making things worse as well as the possibility of making things better. If things go badly, handicapped students will be stigmatized, stereotyped, and rejected. Even worse, they may be ignored or treated with the paternalistic care one reserves for pets. If things go well, however, true friendships and positive relationships may develop between the nonhandicapped and handicapped students. What does the regular classroom teacher do to ensure that mainstreaming goes well? The answer goes beyond explanations of the law; additional forms to be completed; extra meetings to attend; or lectures on various learning, emotional, and physical disabilities.

What is needed is an understanding of how the process of acceptance works in a classroom setting and an understanding of the specified teaching strategies that help to build positive relationships between handicapped and nonhandicapped students as they attend the regular classroom together. This chapter defines mainstreaming, recognizing the relationship between handicapped and nonhandicapped students as a key issue; presents the process of social judgment as highlighting the difference between acceptance and rejection of handicapped students; and details the specific strategies for setting up heterogeneous cooperative groups of handicapped and nonhandicapped students to encourage acceptance, friendships, and higher achievement. First, the rationale for mainstreaming and a definition are necessary.

RATIONALE FOR MAINSTREAMING

The current emphasis on mainstreaming was brought about by a series of factors including the following (Telford & Sawrey, 1977):

1. The failure of research studies to establish the effectiveness of special classes for the handicapped.
2. A realization of the inadequacy of medically and psychologically defined diagnostic categories for educational purposes.

3. Evidence that factors irrelevant to education and aptitude, such as social class, race, personality, and manageability, were influencing special class placement.
4. Documentation of the deleterious effects of stigmatization.

In addition, Johnson (1979) noted that all students need equal access to school resources, and that the healthy social development of handicapped students requires that they be part of the mainstream of the social life of same age, nonhandicapped children and adolescents.

Access to Resources

School resources include both the human and material elements that can influence achievement and socialization (Johnson, 1979). These resources may include access to highly motivated peers, specific socialization processes, counselors, or aspects of the curriculum and instructional programs. One of the most important resources within the school is peers who encourage educational aspirations, achievement, and appropriate social behavior. By placing students in different classes or in different tracks during high school, educators determine who has access to whom in terms of student interrelationships. Assignment to different tracks in high school has been found to influence directly and indirectly educational aspirations, academic self concept, orientation toward intellectualism, who is picked as friends, and who one wants to be like (Alexander & McDill, 1976; Karweit, 1976). Even encouragement to use school counselors and actual visits to counselors has been found to influence whether one is placed in a college preparatory track (Heys, 1974).

Long Term Social Development

In order to develop psychologically, handicapped students must have the normal life experiences of members of our society, such as going to parties and dances, taking buses, shopping, and dating (Johnson, 1979). These experiences are usually obtained in an adolescent peer group as part of the process of adjusting to physical and social maturity. If handicapped children and adolescents are segregated throughout their school lives, how will they develop the friends they need during adolescence? Gordon (1969) noted that one of the most serious problems handicapped children manifest, particularly as they grow into adolescence, is the lack of friends. He implied that one cause for the lack of friends is the lack of social skills gained in day to day interaction with nonhandicapped peers. Siegel (1969) considered the major characteristic of older populations of handicapped students to be their lack of social skills. The isolation from and lack of positive interaction with nonhandicapped peers is, perhaps, the most destructive aspect of the lives of handicapped students.

Integration into the Mainstream

Any definition of mainstreaming that does not include the premise that it should be conducted to maximize the likelihood of handicapped students' access to constructive interactions with nonhandicapped peers and normal life experiences is incomplete. Placing a handicapped student in the corner of a classroom and providing individualistic learning experiences is not effective mainstreaming. Mainstreaming is successful only if it encourages and promotes friendships between handicapped and nonhandicapped peers (Johnson, 1979; Johnson & Johnson, 1978). Thus, a complete definition of mainstreaming is as follows:

> *Mainstreaming* is the provision of an appropriate educational opportunity for all handicapped students in the least restrictive alternative, based on individualized education programs, with procedural safeguards and parent involvement, and *aimed at providing handicapped students with access to* and *constructive interaction with nonhandicapped peers.*

What does the mainstreamed classroom look like? Exceptional students spend most of the day in regular classrooms, leaving occasionally to go to a resource room or resource center for educational assessments, individual tutoring, or small group instruction, or to pick up and deliver assignments prepared by the resource teacher but completed in the regular classroom. The resource teacher and the regular classroom teacher, working as a team, may schedule a student to use the resource center for a few minutes or several hours, depending on the student's learning needs. The regular classroom teacher and the resource teacher share responsibility for the learning and socialization of exceptional students, and both take an active instructional role. The exceptional students spend more than half the day in regular classes. While the regular classroom teacher is responsible for grades and report cards, he or she usually consults with the resource teacher in grading exceptional students.

Some problems with mainstreaming have yet to be solved. Too often, special education programs are dropped and students simply are returned to the same classrooms from which they were originally referred for special help. Such a practice does not allow for the fact that these students have learning problems and, in the past, failed to learn in the regular classroom. It is not doing handicapped students a favor to throw them back into a pool of normal learners and let them sink or swim there. Regular classroom teachers are not receiving additional training in the instructional strategies necessary for effective mainstreaming.

One other point needs to be made about students' access to each other in the classroom: It is effective and proper for classroom teachers to hold a broad definition of mainstreaming when it comes to interactions within the classroom. The "very quiet" student sitting by the window, the very bright child sitting near the front, the disruptive student at the back, and the responsible, "average" student seated in the middle of the room all need to be mainstreamed in the classroom setting along with handicapped students. All students gain by being part of a classroom climate emphasizing the building of accepting, helping, and caring relationships. Learning outcomes for all students are discussed briefly in a later section of this chapter. For the moment, let us turn to one of the initial problems in mainstreaming—the attitudes of nonhandicapped students toward their handicapped peers.

ATTITUDES TOWARD HANDICAPPED PEERS

Underlying the movement to integrate handicapped students into the regular classroom are the assumptions that labeling will be reduced when handicapped students are not physically separated from the regular classroom (Flynn, 1974), the stigma attached to handicaps will be reduced (Dunn, 1968), negative stereotyping will be diminished through increased contact between handicapped and nonhandicapped students (Christopolos & Renz, 1969; Fischer & Rizzo, 1974), and handicapped students will have equal access to the social resources required for maximum achievement and healthy social and cognitive development (Johnson, 1979). Whether or not these goals are achieved depends on the pattern of interaction that teachers structure between handicapped and nonhandicapped students.

THE PROCESS OF MAKING SOCIAL JUDGMENTS

Much of the traditional research on attitude change has focused on isolated and temporary experiences in which people are exposed to a single communication aimed at influencing them in a certain way. The mainstreaming situation, in which students interact with each other over a period of months and even years, is considerably more complex. Negative attitudes toward handicapped peers exist before mainstreaming begins and first impressions and the labeling process reinforce such stigmatization; but it is the actual interaction between handicapped and nonhandicapped students that determines whether a process of acceptance or rejection will mitigate or strengthen the rejection of handicapped peers.

The process of making social judgments about handicapped peers is reflected in Figure 1 and can be described as follows:

1. Original negative attitudes are based on the general stigmatization of handicaps by society at large.
2. An initial impression is made on the basis of initial actions and perceived characteristics of the handicapped students.
3. Categories classifying the handicapped students' characteristics are formed with labels being attached to each category.

4. Interaction with the handicapped students occurs; it is of great importance whether that interaction takes place within a context of positive, negative, or no interdependence.
5. Depending on the social context within which interaction takes place, a process of acceptance or rejection occurs.
6. The process of acceptance results from interaction within a context of positive goal interdependence, which furthers promotive interaction and feelings of acceptance and psychological safety; differentiated, dynamic, realistic views of collaborators and self; positive cathexis toward others and self; and expectations for rewarding and enjoyable future interaction with classmates.
7. The process of rejection results from interaction within a context of negative or no goal interdependence. Negative goal interdependence promotes oppositional interaction and feelings of psychological rejection and threat, and no goal interdependence results in no interaction with peers. Both lead to monopolistic, static, and stereotyped views of classmates, negative cathexis toward others and self, and expectations for distasteful and unpleasant future interaction with other students.
8. With further interaction, the process of acceptance or rejection may be repeated.

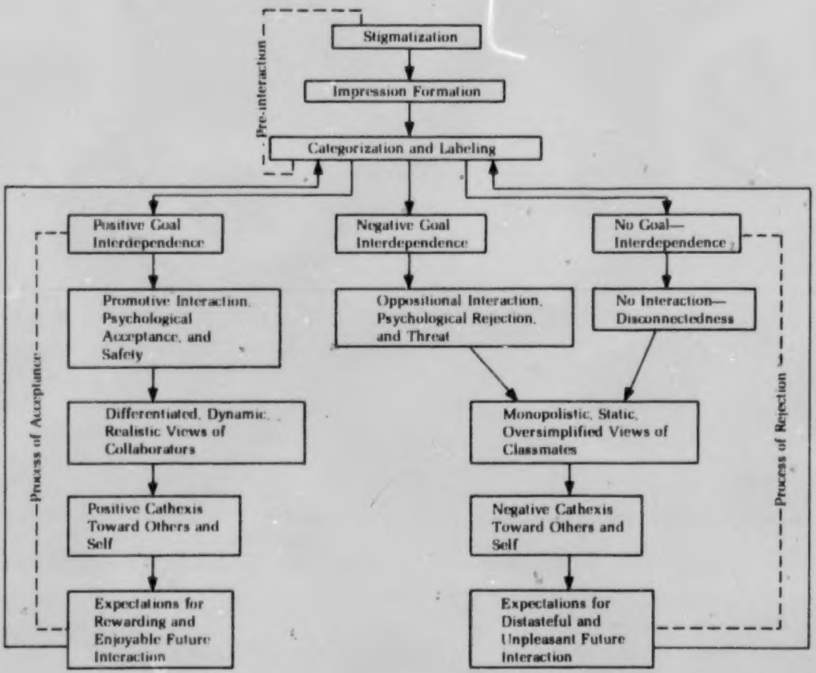
Pre-interaction
Stigmatization
Impression Formation
Categorization and Labeling
Positive Goal Interdependence
Negative Goal Interdependence
No Goal—Interdependence
Promotive Interaction, Psychological Acceptance, and Safety
Oppositional Interaction, Psychological Rejection, and Threat
No Interaction—Disconnectedness
Differentiated, Dynamic, Realistic Views of Collaborators
Monopolistic, Static, Oversimplified Views of Classmates
Positive Cathexis Toward Others and Self
Negative Cathexis Toward Others and Self
Expectations for Rewarding and Enjoyable Future Interaction
Expectations for Distasteful and Unpleasant Future Interaction
Process of Acceptance
Process of Rejection

FIGURE 1. Social Judgment Process

What Is Stigmatization?

Goffman (1963) defined a *stigma* as deeply discrediting attribute of an individual. Goffman's work represents the only major theoretical work in the area of stigmatization. He distinguished between an individual's "virtual social identity," which is the character imputed to the individual by society, and "actual social identity," which reflects the person's true identity. It is virtual social identity that carries the discrediting connotation. According to Goffman, three types of stigma can be identified: (a) physical disablilities, (b) character disorders, and (c) tribal stigmas, such as ethnic membership or religious affiliation that is transmitted through the family and affects all members. When individuals have a highly visible stigma, simple proximity to others causes their stigma to be known. And certain stigmas (such as mental retardation) may be viewed by nonhandicapped students as disqualifying the handicapped students from certain activities (e.g., academic work). To the extent that a handicap disqualifies students from major activities in the classroom, it influences the handicapped students' acceptability to nonhandicapped peers. Finally, some stigmas may interfere with interactions with nonhandicapped peers (e.g., deafness, blindness, and inability to walk), thus being quite obtrusive and leading to a lack of opportunity to reduce rejection. These three aspects of the visibility of the stigma (readily apparent, disqualifying, and obtrusive) all affect the strength of the feelings of nonhandicapped students (Abelson, 1976). For most handicapped students, stigmatization has taken place before mainstreaming occurs.

When handicapped students are first placed in the regular classroom, there can be little doubt that nonhandicapped peers will have negative attitudes toward them that reflect the process of stigmatization. A variety of research studies indicate that students who are perceived as handicapped by nonhandicapped students are viewed in negative and prejudiced ways, whether or not the handicapped children and adolescents are in the same or separate classrooms (Goodman, Gottlieb, & Harrison, 1972; Gottlieb & Budoff, 1973; Gottlieb & Davis, 1973; Jaffe, 1966; Johnson, 1950; Johnson & Kirk, 1950; Miller, 1956; Novak, 1975; Rucker, Howe, & Snider, 1969).

How Are Impressions Formed?

The second step in making social judgments about handicapped peers begins with the formation of an initial impression when they enter the classroom. One's cognitive representations of what another person is like are greatly influenced by the first few minutes of proximity (Heider, 1958; Kelley, 1973). First impressions can be strong and resistant to change, even with the introduction of contradictory information (Watson & Johnson, 1972). The formation of an impression of another person occurs through perceiving initial actions and appearances and generalizing from these initial impressions to the person's total personality (Asch, 1952). Three important aspects of first impressions need to be taken into account: (a) the primary potency of being handicapped, (b) the number of characteristics included in the impression, and (c) the strength of the impression.

Some characteristics are more important than others in forming an initial impression. Asch (1952) designated some characteristics as *central* and others as *peripheral*; and Allport (1954) designated the characteristics that overshadow much observed behavior as of *primary potency*. It is important to note that even when nonhandicapped students have a great deal of information available about a handicapped peer, the characteristic "handicapped" may dominate initial impressions. Such characteristics as physical attractiveness (Berscheid & Walster, 1974) and perceived similarity to oneself (Taylor & Kowiumake, 1976) have been found to be of primary potency.

Impressions may be classified as either differentiated or monopolistic on the basis of the number of characteristics included in the impression and the way the impression is influenced by the requirements of a given situation. A *differentiated impression* includes many different characteristics which are weighted differently in individual situations. When only a few characteristics are perceived and they are weighted the same in all situations, a *monopolistic impression* exists. According to Allport (1954), humans operate under the "principle of least effort," which means that monopolistic impressions are easier to form and maintain than differentiated impressions.

Finally, differentiated impressions, by their very nature, are in a dynamic state of change because of their tentativeness and the differential weighting of characteristics according to the current situation. Monopolistic impressions, by their very nature, are static due to their rigid weighting of a few characteristics of primary potency regardless of the demands of the current situation.

As one forms an impression of another person, one inevitably categorizes and then labels aspects of the other's appearance and actions. It is to the issues of categorization and labeling that we now turn.

How Do Categorization and Labeling Function?

When nonhandicapped students form an impression of mainstreamed handicapped peers, they categorize the handicapped students' characteristics, attach a label to each category, and form a conceptual structure that organizes the overall impression, as with all perception and learning. Categorizing and labeling are natural aspects of human learning, thought, and memory (Johnson, 1979), but the way in which nonhandicapped students categorize, label, and organize their impressions of handicapped peers has an important effect on mainstreaming. Categorization and labeling may lead to differentiated, dynamic, and realistic impressions, or it may lead to errors based on rigid stereotypes.

Labels are a way of consolidating information into one easily retrievable term. Labels inevitably carry evaluative connotations as well as denotative meanings. Although labeling is inevitable, labels applied to handicapped peers may have negative effects by emphasizing monopolistic categories of primary potency that carry stigmas, by encouraging treatment only in terms of handicaps, and by assigning handicapped students to a low power position.

Combs and Harper (1967) have shown that certain groups, such as psychopathic, schizophrenic, and cerebral palsied children, were rated more negatively by teachers when labeled than when unlabeled. Teachers also held lower expectations for performance from students labeled "culturally deprived" or "juvenile delinquent" (Jones, 1972). Labels, further, often define power relationships between the labeler and the labeled, placing the labeled in a low power position.

What Kinds of Interaction Are Desirable?

When mainstreaming begins and handicapped students enter the regular classroom, nonhandicapped students form an initial impression of their handicapped classmates, categorize the observable characteristics, and attach labels to the categories. The labels of "mentally retarded," "learning disabled," "emotionally disturbed," "hearing impaired," and so forth, have negative connotations that carry stigmas. From the beginning, therefore, handicapped students are perceived somewhat negatively, and this perception sets up a strong possibility of rejection by nonhandicapped peers.

The physical proximity between handicapped and nonhandicapped students, created by placing them in the same classroom, is the beginning of an opportunity, but like all opportunities, it carries a risk of making things worse as well as the possibility of making things better. Physical proximity does not mean that stigmatization, stereotyping, and rejection of handicapped peers by nonhandicapped students will automatically result, or that handicapped students will automatically be included in the peer relationships with nonhandicapped classmates necessary for maximum achievement and healthy social development. Several studies indicate that placing handicapped and nonhandicapped students in close physical proximity (e.g., the same classroom) may increase nonhandicapped students' prejudice toward and stereotyping and rejection of their handicapped peers (Goodman, Gottlieb, & Harrison, 1972; Gottlieb & Budoff, 1973; Gottlieb, Cohen, & Goldstein, 1974; Iano, Ayers, Heller, McGettigan, & Walker, 1974; Panda & Bartel, 1972). On the other hand, there is also evidence that placing handicapped and nonhandicapped students in the same classroom may result in more positive attitudes of nonhandicapped students toward their handicapped peers (Ballard, Corman, Gottlieb, & Kaufman, 1977; Higgs, 1975; Jaffe, 1966; Lapp, 1957; Sheare, 1975; Wechsler, Suarez, & McFadden, 1975). This contradictory evidence is consistent with previous research on ethnic integration, which indicates that while contact between stigmatized and nonstigmatized students may be a necessary condition for reducing prejudice and rejection, it is not a sufficient one (Gerard & Miller, 1975; Harding, Proshansky, Kutner, & Chein, 1969; Shaw, 1973; Watson & Johnson, 1972; Wolf & Simon, 1975).

During the initial interaction between nonhandicapped and handicapped classmates, furthermore, the nonhandicapped students may feel discomfort and show "interaction strain." Siller and Chipman (1967), Whiteman and Lukoff (1964), and Jones (1970) found that physically nonhandicapped persons reported discomfort and uncertainty in interacting with physically handicapped peers. Kleck and his associates provided evidence that nonhandicapped individuals interacting with a physically handicapped (as opposed to physically nonhandicapped) person exhibited greater motoric inhibition (Kleck, 1968), greater physiological arousal (Kleck, 1966), less variability in their behavior, terminated interaction sooner, expressed opinions that were not representative of their actual beliefs, and reported discomfort in the interaction (Kleck, Ono, & Hastorf, 1966). In the case of a person said to have epilepsy, the nonhandicapped individuals maintained greater physical distance (Kleck, Buck, Goller, London, Pfeiffer, & Vukcevic, 1968). Jones (1970), furthermore, found that nonhandicapped college students who performed a learning task in the presence of a blind confederate (as opposed to a sighted confederate) reported stronger beliefs that they would have performed better on the task if the blind person had not been present, even when the actual performance data indicated that the presence of a blind or sighted person had no significant effects on the college students' achievement. The discomfort many nonhandicapped students seem to feel during initial interaction with a handicapped peer may add to the risk that a monopolistic, static, and overly simplified view of handicapped peers as being stigmatized may dominate relationships between the two groups of students when handicapped students are mainstreamed into the regular classroom.

Whether interaction between handicapped and nonhandicapped students results in a process of acceptance or rejection is determined by the type of interdependence among students' learning goals and rewards that is structured by the teacher. Within any learning situation, a teacher can structure positive goal interdependence (i.e., cooperation), negative goal interdependence (i.e.,competition), or no goal interdependence (i.e., individualistic efforts) (Johnson & Johnson, 1975). In a *cooperative* learning situation, students' goal attainment is positively correlated and students coordinate their actions to achieve the goal. Students can achieve their learning goal if, and only if, the other students with whom they are cooperatively linked achieve their learning goal. In a *competitive* learning situation, students' goal attainment is negatively correlated and one student can obtain his or her goal only if the other students with whom he or she is competitively linked fail to obtain their learning goal. In an *individualistic* learning situation, the goal achievement of each student is unrelated to the goal attainment of others; there is no correlation among students' goal attainment. The students' success is contingent on their own performance irrespective of the quality of performance of others.

Student Interaction

Each goal structure promotes a different pattern of interaction among students. Aspects of student interaction important for learning (Johnson & Johnson, 1975) are accurate communication and exchange of information, facilitation of each other's efforts to achieve, constructive conflict management, peer pressures toward achievement, decreased fear of failure, divergent thinking, acceptance and support by peers, use of other's resources, trust, and emotional involvement in and commitment to learning. A summary of the research findings on the relations between the three goal structures and these aspects of student interaction is presented in Table 1 (for specific references, see Johnson & Johnson, 1975, 1978). Cooperation provides opportunities for positive interaction among students, while competition promotes cautious and defensive student interaction (except under very limited conditions). When students are in an individualistic goal structure, they work by themselves to master the skill or knowledge assigned without interacting with other students.

In the ideal classroom all three goal structures are used appropriately. All students learn how to work cooperatively with other students, compete for fun and enjoyment, and work autonomously. Most of the time, however, students work on instructional tasks within the goal structure that is most productive for the type of task and the cognitive and affective outcomes desired. The teacher decides which goal structure to implement within each instructional activity. The way in which teachers structure learning goals determines how students interact with each other and with the teacher. The interaction patterns, in turn, determine the cognitive and affective outcomes of instruction. When teachers wish to promote positive interaction among students, a cooperative goal structure is used, and competitive and individualistic goal structures are avoided. The obvious conclusion is that positive mainstreaming is facilitated by the cooperative interaction pattern and hindered by the competition of individualism. Let us look at the processes of acceptance and rejection for further clarification of this conclusion.

PROCESS OF ACCEPTANCE

The process of acceptance (see Figure 1) begins when handicapped and nonhandicapped students are placed in small, heterogeneous

TABLE 1

Goal Structures and Interpersonal Processes Affecting Learning

Cooperation	Competition	Individualism
High interaction	Low interaction	No interaction
Effective communication	No, misleading, or threatening communication	No interaction
Facilitation of other's achievement: helping, sharing, tutoring	Obstruction of other's achievement	No interaction
Peer influence toward achievement	Peer influence against achievement	No interaction
Problem solving conflict management	Win-lose conflict management	No interaction
High divergent and risk taking thinking	Low divergent and risk taking thinking	No interaction
High trust	Low trust	No interaction
High acceptance and support by peers	Low acceptance and support by peers	No interaction
High emotional involvement in and commitment to learning by almost all students	High emotional involvement in and commitment to learning by the few students who have a chance to win	No interaction
High use of other students' resources	No use of other students' resources	No interaction
Division of labor possible	Division of labor possible	No interaction
Decreased fear of failure	Increased fear of failure	No interaction

learning groups and assigned a lesson to complete as a group, making sure that all members master the assigned work. In other words, a positive interdependence is structured among students' learning goals. There is a great deal of research comparing the effects of cooperative, competitive, and individualistic learning (Johnson & Johnson, 1975, 1978). Compared with competitive and individualistic learning situation, working cooperatively with peers

1. Creates a pattern of promotive interaction, in which there is
   a. more direct face to face interaction among students.
   b. An expectation that one's peers will facilitate one's learning.

c. More peer pressure toward achievement and appropriate classroom behavior.
d. More reciprocal communication and fewer difficulties in communicating with each other.
e. More actual helping, tutoring, assisting, and general facilitation of each other's learning.
f. More open mindedness to peers and willingness to be influenced by their ideas and information.
g. More positive feedback to and reinforcement of each other.
h. Less hostility, both verbal and physical, expressed toward peers.

2. Creates perceptions and feelings of
   a. Higher trust in other students.
   b. More mutual concern and friendliness for other students, more attentiveness to peers, more feelings of obligation to and responsibility for classmates, and desire to win the respect of other students.
   c. Stronger beliefs that one is liked, supported, and accepted by other students, and that other students care about how much one learns and want to help one learn.
   d. Lower fear of failure and higher psychological safety.
   e. Higher valuing of classmates.
   f. Greater feelings of success.

Positive goal interdependence creates these patterns of promotive interaction and psychological states which, in turn, tend to create (a) differentiated, dynamic, and realistic impressions of handicapped classmates by nonhandicapped students and (b) a positive cathexis toward others and oneself.

Labeled handicaps lose their primary potency when a view of the handicapped peer as a person becomes highly differentiated, dynamic, and realistic. A differentiated, dynamic impression includes many different categories; each category is assigned a weight as to its importance according to the demands of any specific situation, and the weight or salience of each category changes as the requirements of a situation change. New information concerning the handicapped peers is admitted to one's impression as it becomes relevant. Thus, if a peer is visually impaired, this category may be noted when the group is trying to read what the teacher has written on the blackboard, but it will be forgotten when the group is discussing the materials under study. The conceptualization of the handicapped peer stays in a dynamic state of change, open to modification with new information, and takes into account situational factors.

As nonhandicapped students work closely with handicapped peers, the boundaries of the handicap become clearer. While handicapped students may be able to hide the extent of their disability when they are isolated, the intensive promotive interaction under positive goal interdependence promotes a realistic as well as differentiated view of the handicapped students and their disabilities. If a handicapped member of a learning group cannot read or speak clearly, the other members of the learning group become highly aware of that fact. With the realistic perception, however, there also comes a decrease in the primary potency of the handicap and a decrease in the stigmatization connected with the handicapped person.

A direct consequence of cooperative experiences is a positive cathexis in which (Deutsch, 1949, 1962; Johnson & Johnson, 1975, 1978)

1. The positive value attached to another person's efforts to help one achieve one's goals becomes generalized to the person.
2. Students positively cathect to their own actions aimed at achieving the joint goal and generalize that value to themselves as persons.

In other words, the acceptance of and liking for handicapped peers by nonhandicapped students increase when interaction occurs within a context of positive goal interdependence, and the self attitudes of handicapped students become more positive.

PROCESS OF REJECTION

The process of rejection is also described in Figure 1. When handicapped students are first placed in the classroom they carry a social stigma that dominates initial impressions and leads to the formation of monopolistic stereotypes which are static and overshadow much observed behavior. This initial tendency toward the rejection of handicapped students by nonhandicapped peers is perpetuated by instructing students to work alone with the purpose of either outperforming their peers (competition) or meeting a set criterion (individualistic efforts).

When interaction between handicapped and nonhandicapped students takes place within a context of negative goal interdependence, compared with cooperative learning activities (Johnson, 1975, 1978):

1. There is a pattern of oppositional interaction in which students
   a. Have little face to face interaction.
   b. Expect peers to impede the achievement of their learning goals.
   c. Face peer pressure against achievement and appropriate classroom behavior.
   d. Communicate inaccurate information and frequently misunderstand each other.
   e. Are closed minded to and unwilling to be influenced by peers.
   f. Give each other negative feedback.
   g. Express verbal and physical hostility toward peers.
2. There are perceptions and feelings of
   a. Distrust for other students.
   b. Higher fear of failure and more feelings of failure.

c. Less mutual concern and feelings of responsibility for peers.
d. Being rejected and disliked by classmates.

Negative goal interdependence creates these patterns of oppositional interaction and psychological states which, in turn, create (a) monopolistic, static, and oversimplified impressions of handicapped classmates by nonhandicapped students, and (b) negative feelings toward others and oneself.

When interaction between handicapped and nonhandicapped students takes place within a context of no goal interdependence, students are instructed to work on their own without interacting with other students, with their own materials, and on goals that are independent from the learning goals of other students. In such a situation, there is no interaction among students and no structured interconnection with peers. Student independence during learning activities creates (a) monopolistic, static, and oversimplified impressions of handicapped classmates by nonhandicapped students, and (b) negative feelings toward others and oneself.

Both competitive and individualistic learning activities provide little or no information about handicapped peers, thus allowing initial stereotypes to continue. What little information is available is likely to confirm existing impressions that handicapped peers are "losers." The boundaries of the handicap are not clarified.

A direct consequence of competitive experiences is negative attitudes in which (Deutsch, 1949, 1962; Johnson & Johnson, 1975, 1978):

1. The negative value attached to a classmate's efforts to achieve becomes generalized to them as people (because if they "win," you "lose").
2. Students feel negative about their own actions when they lose and they generalize the negative evaluation to themselves as persons. (In the usual classroom, achievement hierarchies are relatively stable, leaving the majority of students to continually experience failure.)

Generally, the research indicates that in comparison with cooperative situations, classmates in competitive situations are disliked and self esteem is lower for all students except for the few "winners." Both self esteem and liking for classmates are lower in individualistic than cooperative learning situations (Johnson & Johnson, 1975, 1978); the theoretical rationale for these findings is somewhat unclear, however.

SELF ATTITUDES OF HANDICAPPED STUDENTS

The processes of acceptance and rejection create expectations for future interactions between handicapped and nonhandicapped students. The process of acceptance leads to expectations of rewarding and enjoyable experiences while the process of rejection leads to expectations of negative experiences. These expectations, as well as the labels and categories used in nonhandicapped students' conceptions of handicapped peers, affect the self attitudes of handicapped students.

The behavior of a stigmatized individual is considered deviant when it departs from social norms. For example, when a child labeled retarded performs poorly on a simple intellectual task, he or she is behaving correctly; but if the child successfully completes the task, he or she is behaving inappropriately. The social response to this behavior may be, "What's wrong? You're not supposed to be able to do that!" and may lead to the extinguishing of achievement behavior. Labels are stabilized when the handicapped student accepts the label and behaves in accordance with it. The process of becoming handicapped, therefore, consists of three steps: the actions of the child, the labeling of the actions as a handicap, and a self concept change leading the child to consider himself or herself handicapped.

The impact of peer expectations and labels may be especially powerful for handicapped students. Turnure and Zigler (1958) demonstrated that retarded children and children who have a history of failure are more outer directed than are nonhandicapped children and children who have a history of success. This outer directedness was demonstrated to increase the influence of models on the children's behavior. It also may increase the impact of peers' expectations and labels on self attitudes.

When handicapped students are viewed negatively, stereotyped, and disliked, and when nonhandicapped students expect future interaction with them to be distasteful and unpleasant, the self attitudes of the handicapped students may become negative. When handicapped students are viewed by nonhandicapped peers in differentiated, dynamic, and realistic ways and the expectations are that future interactions will be enjoyable and rewarding, the self attitudes of the handicapped students may become positive.

There is correlational evidence that cooperativeness is positively related to self esteem in students throughout elementary, junior, and senior high school in rural, urban, and suburban settings; competitiveness is generally unrelated to self esteem; and individualistic attitudes tend to be related to feelings of worthlessness and self rejection (Johnson & Gunderson, 1978; Johnson & Ahlgren, 1976; Johnson, Johnson, & Anderson, 1978; Johnson & Norem-Hebeisen, 1977; Norem-Hebeisen & Johnson, 1980). There is experimental evidence indicating that cooperative learning experiences, compared with individualistic ones, result in higher self esteem (Johnson, Johnson, & Scott, 1978), that cooperative learning experiences promote higher self esteem than does learning in a traditional classroom (Blaney, Stephan, Rosenfield, Arsonon, & Sikes, 1977; Geffner, 1978), and that failure in competitive situations promotes increased self derogation (Ames, Ames, & Felker, 1977).

In a series of studies with suburban junior and senior high school students Norem-Hebeisen and Johnson (1980) examined the relationship between cooperative, competitive, and individualistic attitudes and ways of conceptualizing one's worth from the information that is available about oneself. Four primary ways of deriving self esteem are: basic self acceptance (a belief in the intrinsic acceptability of oneself), conditional self acceptance (acceptance contingent on meeting external standards and expectations), self evaluation (one's estimate of how one compares with one's peers), and real-ideal congruence (correspondence between what one thinks one is and what one thinks one should be). Attitudes toward cooperation were found to be related to basic self acceptance and positive self evaluation compared to peers; attitudes toward competition were found to be related to conditional self acceptance; and individualistic attitudes were found to be related to basic self rejection.

COOPERATIVE INTERACTION AND MAINSTREAMING

It should be noted that at any time in the classroom the process of rejection can be replaced by the process of acceptance by structuring cooperative interaction between handicapped and nonhandicapped students. There is evidence that cooperative interaction between nonhandicapped and handicapped students promotes acceptance and positive attitudes toward each other as well as positive self attitudes.

Interpersonal Attraction

Considerable evidence has accumulated that cooperative interaction, compared with competitive interaction and individualistic efforts, promotes a great deal of interpersonal attraction among students (Johnson & Johnson, 1975, 1978). When students expect to cooperate with each other and when they actually do cooperate, peers who are perceived to be markedly different from oneself are liked, even if they lower the overall achievement of the group (D. Johnson & Johnson, 1972; S. Johnson & Johnson, 1972). Johnson, Johnson, and Scott (1978) found that cooperative learning experiences, compared to individualistic ones, lead to a greater valuing of heterogeneity among peers and to the choosing of peers one has cooperated with in the past for future learning groups, even when these peers are less able than other classmates.

The results of two large scale surveys indicate that the more favorable students' attitudes toward cooperation, the more positive they feel toward peers who are less bright and also toward those who are smarter (Johnson & Ahlgren, 1976; Johnson, Johnson, & Anderson, 1978). Attitudes toward competition and individualism are not related to liking for either set of peers. From the second through the twelfth grades, in rural, suburban, and urban schools, cooperativeness is related to valuing other students, no matter what their achievement levels or intellectual potentials seem to be. Cooperativeness, furthermore, was found to be consistently related to positive attitudes toward listening to and liking other students, and believing that one is liked by other students, while students competitiveness and individualism are not related to these attitudes.

Five studies have directly compared cooperatively structured learning with competitive and individualistic instruction when handicapped students were mainstreamed into the regular classroom. In the first, Armstrong, Johnson and Balow (1980) compared cooperative with individualistic instruction in language arts for 40 fifth and sixth grade students for 90 minutes a day for a 4 week period. Of the sample 25% (10) were males with learning disabilities, Armstrong and her colleagues found that the regular classroom students in the cooperative learning groups evaluated their learning disabled peers as more valuable and smarter than did the regular classroom students in the individualistic condition. Regular classroom students in the cooperative condition also believed they knew their learning disabled peers better, chose them for friends more often, felt that they had been more frequently helped by their learning disabled peers, and wished for them to be removed from the classroom less frequently. The learning disabled students were far less isolated in the cooperative than in the individualistic condition.

In the second study, 12 second and third grade boys enrolled in a summer swimming program were either taught in cooperative pairs or individualistically (Martino & Johnson, 1979). Three nonhandicapped and three learning disabled boys were randomly assigned to each condition. In the cooperative condition, a nonhandicapped and a learning disabled boy were randomly assigned to each pair. Observers recorded the number of times the nonhandicapped boys interacted with the learning disabled students during a 15 minute free swim period at the end of each 1 hour class. Over the 9 days of instruction, in the individualistic condition there was only one instance of a friendly interaction between a nonhandicapped and a learning disabled student. In the cooperative condition, there were up to 20 daily instances of friendly interaction during the free time between nonhandicapped and learning disabled students, with an average of 10 friendly interactions per day. There was an average of three hostile interactions between nonhandicapped and learning disabled boys each day in the individualistic condition while there was an average of one hostile interaction per day between the two types of students in the cooperative condition.

In a study of seventh graders, Cooper, Johnson, Johnson, and Wilderson (1980) studied the relationships between regular classroom students and learning disabled and emotionally disturbed students in cooperative, competitive, and individualistic science, English, and geography classes. Each class period lasted 60 minutes and the study lasted for 15 instructional days; students, therefore, received 45 hours of instruction in each condition. The researchers found that far more students reported helping and receiving help from their handicapped peers in the cooperative than in the other two conditions. Regular classroom students in the cooperative and competitive conditions chose handicapped peers for friends more frequently than did the nonhandicapped students in the individualistic condition.

In a fourth field experiment, the effects of cooperative, individualistic, and laissez faire goal structures were compared on interpersonal attraction between nonhandicapped junior high school students and severely retarded peers (Johnson, Rynders, Johnson, Schmidt, & Haider, 1979). Students were from a public junior high school, a Catholic junior high school, and a special station school. The retarded students were functioning at a high trainable level. Students participated in a bowling class that met for 1 hour per week for 6 weeks. The results indicate that considerably more positive, supportive, and friendly interaction took place between the nonhandicapped and the retarded students in the cooperative than in the other two conditions.

In the fifth field experiment, interpersonal attraction between nonhandicapped junior high school students and Down's syndrome students from a special station school was studied under cooperative, competitive, and individualistic conditions (Rynders, Johnson, Johnson, & Schmidt, 1980). Procedures were identical with those used in the previous bowling study. Considerably more positive, supportive, and friendly interaction took place between the two groups of students in the cooperative than in the other two conditions.

Now that the process of social judgment has been explained and the importance of heterogeneous, cooperative grouping has been emphasized, the question is, "How does one set up heterogeneous, cooperative groups in a classroom?" For a brief summary of the specific strategies designed to assist the teacher, let us return to the story of Carl which began this chapter. (The teacher's role in setting up cooperative groups is described in more depth in *Learning Together and Alone*, Johnson & Johnson, 1975.)

STRUCTURING LEARNING TO INSURE INTEGRATION

> Carl glanced shyly around the classroom to see if anyone was watching him. No one was. He began to relax a bit. Carl was able to smile back as the special education teacher gave him an encouraging nod and left the room.

How can the regular classroom teacher structure the interactions Carl will have with the other students in the regular classroom? The teacher has three alternatives:

1. The teacher can place Carl in competition with the other students to see who is best. Competition is based on students' success being dependent on doing better than their classmates. If one student wins,

the other students lose. Competition among students is, of course, out of the question in mainstreaming as it promotes the rejection of low ability students as "losers."

2. The teacher can have Carl and the other students work individually, independent of each other. Carl can then work on material specifically suited to his ability level. What Carl does will not affect the achievement of other students and what other students do will have no effect on Carl's achievement one way or the other. Yet such a practice isolates Carl from his nonhandicapped peers and creates a situation in which he will be ignored or disliked for being "different."
3. The teacher can place Carl in a cooperative learning group with several nonhandicapped peers with the assignment of completing the lesson as a group, making sure that everyone in the group understands the material. *In cooperation, students have a vested interest in insuring that other group members learn, as the group's success depends on the achievement of all members.* Helping, sharing, peer tutoring, and peer encouragement and support for learning, as well as peer acceptance and liking, are all hallmarks of cooperative learning experiences.

Cooperation is the only learning structure that is consistent with the purpose of mainstreaming. In addition, it benefits average and gifted as well as handicapped students.

STRUCTURING LEARNING COOPERATIVELY

> Carl shyly sank down into his seat, hoping the other students would not notice him. The regular classroom teacher announced that all students would be assigned to math groups where they would work together to solve 12 story problems. Carl was startled to hear his name called as he was assigned to a learning group. Joining his group he studied the faces of Susan, Sam, and Sally as they jovially assembled.

What do teachers do to set up heterogeneous cooperative learning groups and to insure that they operate effectively? Although there is no formula for using cooperative groups in instruction, there is a model that outlines the role of the teacher. The following framework has been helpful to many teachers in initiating cooperation during instruction. Each teacher should feel free to modify the plan for his or her classroom setting and students. The model is presented for Carl's math lesson, but it works just as well in other subject areas.

- *As far as possible, specify the instructional objectives.* In the case of this math lesson, the objectives were to have every student master the basic math skills needed to work the assigned problems.

- *Select the group size most appropriate for the lesson.* With young or unskilled students, the best size for the group may be two ot three members. With older or more skilled students, larger groups are possible. In Carl's classroom, the teacher selected a group of four students.
- *Assign students to groups.* Usually, teachers wish to maximize the heterogeneity in the groups, although, at times, homogeneous groups are useful. A common procedure is to give the class a pretest and then assign one high student, two average students, and one low student to each cooperative group. This is what Carl's teacher did.
- *Arrange the classroom* so that group members are close together and the groups are as far apart as possible.
- *Provide the appropriate materials.* In the math lesson in Carl's class, each group was given 12 story problems, one answer sheet, and a checklist for each member entitled, "How well did I work in the group today?"
- *Explain the task and the cooperative goal structure.* For Carl's math group the *task* was to solve the story problems and to insure that all group members understood how to solve each one. Members indicated their understanding by signing the group's answer sheet. (An alternative to the single answer sheet is to give each student an individual test on the material and average the members' scores for the group's score.) The *cooperative structure* involves a group goal (complete the assignment), criteria for success (perfect score is excellent, 80% correct is good, 60% correct is poor), an awareness that all group members receive the *same* reward, and an understanding of cooperative actions to engage in while they are working together (listening carefully to each other, praising each other, checking to make sure everyone understands the material).

> As Sally began to read the first story problem they were to solve Carl began to move his chair away from the group. He felt panic. When Susan, Sam, and Sally turned to him for agreement with their answer he backed his chair further away until it hit a nearby wall. He looked away from their expectant faces as his tears began to overflow despite his best efforts to hold them in.
>
> The teacher quietly appeared at Carl's side and asked what was wrong. "I don't want to work with anybody," he gasped, "I want to go back to my special classroom, to the students I know!"
>
> Observing Carl's fright, the teacher suggested, "The group needs someone to record its answers. Why don't you be the recorder for the group? Susan, Sam, and Sally will appreciate the help."
>
> After Carl was arranged in the center of the group with answer sheet and pencil, the teacher moved to where she could watch the group work. Carl clearly was taking his responsibility as recorder seriously, listening carefully to the answers given by the other group members and writing them down as neatly as he

> could. Sally especially seemed skilled in explaining how to work the problems to Carl.
>
> The next day, observing Carl working in the group, the teacher stopped nearby. Carl smiled at the teacher and left his group temporarily. "This is the most fun I've ever had in school!" he told her.

The story of Carl is true and it illustrates several important aspects of using heterogeneous cooperative groups for instructional purposes. They are summarized in the final three aspects of the teacher's role:

- *Observe the student interaction.* Just because teachers ask students to cooperate with each other does not mean they will always do so. Through observation, teachers can spot problems students have in working together cooperatively.
- *Intervene* as a consultant to help the group(s) solve its problems in working together effectively, learn the interpersonal and group skills necessary for cooperating, and check that all its members are learning the material. Carl's teacher helped to reduce Carl's fear of working with nonhandicapped peers by giving him a structured role to fulfill in the group. The next step is to teach the nonhandicapped students helping skills so that they can explain material successfully to Carl. Carl, furthermore, can be trained in various cooperative skills that help the group work, even if he cannot do the academic work as quickly as his peers.
- *Evaluate* the group products, using a criterion referenced evaluation system. If a mainstreamed student such as Carl is completely unable to do the work assigned, the teacher may wish to use different criteria in evaluating his work, to assign less material for him to learn, to give him different material to learn, or to use improvement scores for him. At the end of each lesson, teachers can have students complete a checklist on how well they worked in their group.

COOPERATION BETWEEN CLASSROOM AND SPECIAL EDUCATION TEACHERS

Successful mainstreaming requires the help and attention of both the special education and regular classroom teachers. There is a specific role for each which requires cooperation to form a team in which they coordinate efforts to educate and socialize the students. The role of the classroom teacher is as follows:

1. Primarily, to structure learning experiences cooperatively and to ensure that the small groups are heterogeneous, with handicapped and nonhandicapped students in the same group. It is the cooperative goal structure that promotes positive interaction among students, no matter how they differ from each other, and provides a supportive context within which integration of handicapped students can take place.

2. To specify a structured role within the cooperative groups for the handicapped students. Many mainstreamed students will be fearful and anxious about interacting with nonhandicapped peers. Clear and structured responsibilities within the small groups will alleviate such feelings.
3. To train nonhandicapped (as well as handicapped) students in helping, tutoring, teaching, and sharing skills. To work effectively within a cooperative learning group, students must be able to help and teach each other, especially when students are heterogeneous in ability. Many teaching skills, such as the use of praise and prompting, are easily taught to students.
4. To make the requirements for the handicapped students reasonable. Some mainstreamed students are not doing grade level work in certain ways. This does not mean that they cannot be part of a cooperative learning group. There are several ways to adapt lessons so that students at markedly different achievement levels can participate in the same cooperative group, such as, (a) use different criteria for success for each group member, (b) vary the amount each group member is expected to master, (c) give group members different lists, words, problems, and then use the average percentage worked correctly as the group's score, (d) use improvement scores for the handicapped students rather than actual performance.

Undoubtedly, handicapped students can be evaluated in other ways that do *not* prevent their working with nonhandicapped peers.

5. To support the positive relationships among peers and the feelings of success experienced by all students that result from participating in cooperative learning experiences.
6. Besides structuring heterogeneous, cooperative learning groups, the regular classroom teacher will want to establish a collaborative working relationship with the special education teachers who also work with the mainstreamed students. The special education teachers are important resources for encouraging appropriate academic and interpersonal behaviors by the mainstreamed students in the regular classroom and, therefore, regular classroom teachers should use them.

The role of the special education resource teacher on such a team is as follows:

1. To consult with the classroom teacher on setting up heterogeneous cooperative learning groups. Facilitate the use of cooperative activities in which handicapped and nonhandicapped students are in the same group by providing the regular classroom teacher with any help that might be needed to do so. Observe the groups systematically, keeping records of how the handicapped and nonhandicapped students interact with each other.

2. To teach the handicapped students structured roles to enact in the small groups. Even if a student cannot read, he or she can listen carefully and summarize what everyone in the group is saying, provide leadership, help to keep the group's work organized, and so on. There is always some way to facilitate a group's work, no matter what handicap a student may have.
3. To teach the nonhandicapped students how to assist and help the handicapped students. Some simple skills, such as the use of praise, can be mastered by nonhandicapped students to improve their ability to work in a heterogeneous cooperative group. There may be specific aspects of a handicap that the nonhandicapped students need to understand in order to adapt their interactions to include the mainstreamed student.
4. To consult with the classroom teacher on making the requirements for the handicapped students reasonable. The regular classroom teacher may need some help in setting up appropriate criteria and assigning appropriate work.
5. To support the positive relationships between handicapped and nonhandicapped students and the feelings of success experienced by all students that result from participating in cooperative learning activities. Low ability students will especially experience a great deal more success in cooperative activities than in competitive or individualistic ones.

Although many good teachers have moved away from the predominatly competitive mode of present classrooms to the use of cooperative groups, for many other teachers the use of cooperative groups, as described in this chapter, seems to be a departure from present practice. Therefore, a brief, "back to basics" statement seems advisable. The use of heterogeneous cooperative learning groups benefits not only the handicapped students being mainstreamed but, also, the average and gifted students in the regular classroom (Johnson & Johnson, 1978). The teaching procedures are straightforward enough so that any teacher can learn them. Yet the importance of cooperative learning experiences goes beyond the integration of handicapped students into the regular classroom and the resulting increases in friendships, social skills, self esteem, and achievement. Cooperation is as basic to humans as the air we breathe. The ability of all students to work cooperatively with other people is the keystone to building and maintaining stable families, careers, and friendships. Being able to perform technical skills such as reading and math are of little use if the person cannot apply them in cooperative interaction with other people in career, family, and community settings. The most logical way to emphasize the use of students' knowledge and skills within a cooperative framework, such as they will meet as members of society, is to use cooperative learning groups in the classroom. A very good case can be made to support the contention that nothing is more basic in education than learning to work cooperatively with other people.

SUMMARY

The central question in mainstreaming for the classroom teacher is, "How will handicapped and nonhandicapped students interact with each other?" Placing handicapped students in the regular classroom is the beginning of an opportunity but, like all opportunities, it carries a risk of making things worse as well as the possibility of making things better. Physical proximity of handicapped and nonhandicapped students does not guarantee positive attitudes and increased acceptance; increased prejudice and rejection may be the result. The crucial factor in whether a process of acceptance or a process of rejection occurs in the classroom is the kind of student interaction fostered by the teacher Although competition and individualism tend to support rejection, cooperative interactions between handicapped and nonhandicapped students encourage the positive social interactions that bring handicapped students into the mainstream of classroom society. It is crucial to note that structuring cooperative learning is not something done for the handicapped students, it is beneficial to all students. The research indicates that it encourages higher achievement and more appropriate self esteem for all students and more positive social interactions throughout the classroom.

Cooperative instruction is based on a set of practical strategies that any teacher can master. It does not require the classroom teacher to become an "expert" in special education. The model described in this chapter provides a natural way for regular and special education teachers to work together as a team.

REFERENCES

Abelson, A. Measuring preschool's readiness to mainstream handicapped children. *Child Welfare*, 1976, 55, 216-220.

Alexander, K., & McDill, E. Selection and allocation within schools: Some causes and consequences of curriculum placement. *American Sociological Review*, 1976, *41*, 963-980.

Allport, G. *The nature of prejudice*. Cambridge MA: Addison-Wesley, 1954.

Ames, C., Ames, R., & Felker, D. Informational and dispositional determinants of children's achievement attributions. *Journal of Educational Psychology*, 1976, *68*, 63-69

Armstrong, B., Johnson, D.W. & Balow, B. *Cooperative goal stuucture as a means of integrating learning-disabled with normal-progress elementary pupils*. Mimeographed report, University of Minnesota, submitted for publication, 1980.

Asch, S. *Social psychology*. Englewood Cliffs NJ: Prentice-Hall, 1952.

Ballard, M., Corman, L., Gottlieb, J., & Kaufman, M. Improving the social status of mainstreamed retarded children. *Journal of Educational Psychology*, 1977, *69*, 605-611.

Berscheid, E., & Walster, E. Physical attractiveness. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 7). New York: Academic, 1974.

Blaney, N., Stephan, C., Rosenfield, D., Arsonson, E., & Sikes, J. Interdependence in the classroom: A field study. *Journal of Educational Psychology*, 1977, *69*, 139-146.

Christopolos, F., & Renz, P. A critical examination of special education programs. *Journal of Special Education*, 1969, *3*, 371-380.

Combs, R., & Harper, J. Effects of labels on attitudes of educators toward handicapped children. *Exceptional Children*, 1967, *34*, 399-406.

Cooper, L., Johnson, D. W., Johnson, R., & Wilderson, F. Effects of cooperative, competitive, and individualistic experiences on interpersonal attraction among heterogeneous peers. *Journal of Social Psychology, 1980.*

Deutsch, M. A theory of cooperation and competition. *Human Relations*, 1949, *2*, 129-152.

Deutsch, M. Cooperation and trust: Some theoretical notes. In M. Jones (Ed.), *Nebraska symposium on motivation*. Lincoln: University of Nebraska Press, 1962.

Dunn, L. Special education for the mildly retarded—Is much of it justifiable? *Exceptional Children*, 1968, *35*, 5-22.

Fischer, C., & Rizzo, A. A paradigm for humanizing special education. *Journal of Special Education*, 1974, *8*, 321-329.

Flynn, T. Regular-class adjustment of EMR students attending a part-time special education program. *Journal of Special Education*, 1974, *8*, 167-173.

Geffner, R. *The effects of interdependent learning on self-esteem, interethnic relations, and intra-ethnic attitudes of elementary school children: A field experiment.* Unpublished doctoral dissertation, University of California at Santa Cruz, 1978.

Gerard, H., & Miller, N. *School desegregation*. New York: Plenum, 1975.

Goffman, E. *Stigma*. Englewood Cliffs NJ: Prentice-Hall, 1963.

Goodman, H., Gottlieb, J., & Harrison, R. Social acceptance of EMR's integrated into a nongraded elementary school. *American Journal of Mental Deficiency*, 1972, *76*, 412-417.

Gordon, S. Psychological problems of adolescents with minimal brain dysfunction. In D. Kronick (Ed.), *Learning disabilities: Its implications to a responsible society*. Chicago: Developmental Learning Materials, 1969.

Gottlieb, J., & Budoff, A. Social acceptability of retarded children in nongraded schools differing in architecture. *American Journal of Mental Deficiency*, 1973, *78*, 15-19.

Gottlieb, J., Cohen, L., & Goldstein, L. Social contact and personal adjustment as variables relating to attitudes toward educable mentally retarded children. *Training School Bulletin*, 1974, *71*, 9-16.

Gottlieb, J., & Davis, J. Social acceptance of EMR children during overt behavioral interactions. *American Journal of Mental Deficiency*, 1973, *78*, 141-143.

Harding, J., Proshansky, H., Kutner, B., & Chein, I. Prejudice and ethnic relations. In G. Lindzey & E. Aronson (Eds.), *The handbook of social psychology* (Vol. 5). Reading MA: Addison-Wesley, 1969.

Heider, F. *The psychology of interpersonal relations*. New York: Wiley, 1958.

Heys, B. Social selection and stratification in schools. *American Journal of Sociology*, 1974, *79*, 1434-1451.

Higgs, R. Attitude formation—Contact or information? *Exceptional Children*, 1975, *41*, 496-497.

42

Iano, R., Ayers, D., Heller, H., McGettigan, J., & Walker, V. Sociometric status of retarded children in an integrated program. *Exceptional Children*, 1974, *40*, 267-271.

Jaffe, J. Attitudes of adolescents toward mentally retarded. *American Journal of Mental Deficiency*, 1966, *70*, 907-912.

Johnson, D. W. *Educational psychology*. Englewood Cliffs NJ: Prentice-Hall, 1979.

Johnson, D. W., & Ahlgren, A. Relationship between student attitudes about cooperation and competition and attitudes toward schooling. *Journal of Educational Psychology*, 1976, *68*, 92-102.

Johnson, D.W., & Gunderson, B. Promoting positive attitudes toward learning a foreign language by using cooperative learning groups. *Foreign Language Annuals*, in press.

Johnson, D. W., & Johnson, R. *Learning together and alone: Cooperation, competition, and individualization* . Englewood Cliffs NJ: Prentice-Hall, 1975.

Johnson, D. W., & Johnson, R. *Mainstreaming: Development of positive interdependence between handicapped and nonhandicapped students*. Minneapolis: University of Minnesota, College of Education, 1978.

Johnson, D. W., & Johnson, R. (Eds.). Social interdependence in the classroom: Cooperation, competition and individualism. *Journal of Research and Development in Education* (Special Issue), 1978, *12*(1).

Johnson, D. W., Johnson, R., & Anderson, D. Relationship between student cooperative, competitive, and individualistic attitudes and attitudes toward schooling. *Journal of Psychology*, 1978, *100*, 183-199.

Johnson, D. W., Johnson, R., & Scott, L. The effects of cooperative and individualized instruction on student attitudes and achievement. *Journal of Social Psychology*, 1978, *104*, 207-216.

Johnson, D. W., & Norem-Hebeisen, A. Attitudes toward interdependence among persons and psychological health. *Psychological Reports*, 1977, *40*, 843-850.

Johnson, D. W., & Johnson, S. The effects of attitude similarity, expectation of goal facilitation, and actual goal facilitation on interpersonal attraction. *Journal of Experimental Social Psychology*, 1972, *8*, 197-206.

Johnson, G. A study of the social position of mentally handicapped children in the regular grades. *American Journal of Mental Deficiency*, 1950, *55*, 60-89.

Johnson, G., & Kirk, S. Are mentally handicapped children segregated in the regular grades? *Exceptional Children*, 1950, *55*, 60-89.

Johnson, R., Rynders, J., Johnson, D. W., Schmidt, B., & Haider, S. Producing positive interaction between handicapped and nonhandicapped teenagers through cooperative goal structuring: Implications for mainstreaming. *American Educational Research Journal*, 1979, *16*, 161-168.

Johnson, S., & Johnson, D. W. The effects of other's actions, attitude similarity, and race on attraction towards the other. *Human Relations*, 1972, *25*, 121-130.

Jones, R. Learning and association in the presence of the blind. *The New Outlook*, December 1970, 317-329.

Jones, R. Labels and stigma in special education. *Exceptional Children*, 1972, *38*, 553-564.

Karweit, N. *School influences on student interaction patterns (Report No. 220).* Baltimore: Center for Social Organization of Schools, Johns Hopkins University, 1976.

Kelley, H. The processes of causal attribution. *American Psychologist,* 1973, *28,* 107-128.

Kleck, R. Emotional arousal in interaction with stigmatized persons. *Psychological Reports,* 1966, *19,* 1226.

Kleck, R. Physical stigma and nonverbal cues emitted in face-to-face interaction. *Human Relations,* 1968, *21,* 19-28.

Kleck, R., Buck, P., Goller, W., London, R. Pfeiffer, J., & Vukcevic, D. Effect of stigmatizing conditions on the use of personal space. *Psychological Reports,* 1968, *23,* 111-118.

Kleck, R., Ono, H., & Hastorf, A. The effects of physical deviance upon face-to-face interaction. *Human Relations,* 1966, *19,* 425-436.

Lapp, E. A study of the social adjustment of slow learning children who were assigned parttime to regular classes. *American Journal of Mental Deficiency,* 1957, *62,* 254-262.

Martino, L., & Johnson, D. W. The effects of cooperative versus individualistic instruction on interaction between normal-progress and learning-disabled students. *Journal of Social Psychology,* 1979, *107,* 177-183.

Mead, G. *Mind, self, and society.* Chicago: University of Chicago Press, 1934.

Miller, G. The magical number seven, plus or minus two: Some limits on our capacity for processing information. *Psychological Review,* 1956, *63,* 81-97.

Norem-Hebeisen, A., & Johnson, D. W. *The relationship between cooperative, competitive, and individualistic attitudes and differentiated aspects of self-esteem.* Mimeographed report, University of Minnesota, submitted for publication, 1980.

Novak, D. Children's responses to imaginary peers labeled as emotionally disturbed. *Psychology in the Schools,* 1975, *12,* 103-106.

Panda, K., & Bartel, N. Teacher perception of exceptional children. *Journal of Special Education,* 1972, *6,* 261-266.

Rucker, C., Howe, C., & Snider, B. The acceptance of retarded children in junior high academic and non-academic regular classes. *Exceptional Children,* 1969, *35,* 617-623.

Rynders, J., Johnson, R., Johnson, D., & Schmidt, B. *Effects of cooperative, competitive, and individualistic goal structures on interaction between handicapped and nonhandicapped adolescents.* Mimeographed report, University of Minnesota, submitted for publication, 1980.

Shaw, M. Changes in sociometric choices following forced integration of an elementary school. *Journal of Social Issues,* 1973, *29,* 143-157.

Sheare, J. *The relationship between peer acceptance and self-concept of children in grades 3 through 6.* Doctoral dissertation, Penn State University, 1975. (University Microfilms No. 76-10, 783).

Siegel, E. *Special education in the classroom.* New York: John Day, 1969.

Siller, J., & Chipman, A. *Attitudes of the nondisabled toward the physically disabled.* New York: New York University, 1967.

Taylor, S., & Kowiumake, J. The perception of self and others: Acquaintanceship, affect, and actor-observer differences. *Journal of Personality and Social Psychology,* 1976, *33,* 403-408.

14

Telford, C., & Sawrey, J. *The exceptional individual.* Englewood Cliffs NJ: Prentice-Hall, 1977.

Turnure, J., & Zigler, E. Outer-directedness in the problem solving of normal and retarded students. *Journal of Abnormal and Social Psychology,* 1958, *57,* 379-388.

Watson, G., & Johnson, D. W. *Social psychology: Issues and insights.* Philadelphia: Lippincott, 1972.

Wechsler, H., Suarez, A., & McFadden, M. Teachers' attitudes toward the education of physically handicapped children: Implications for implementation of Massachusetts Chapter 766. *Journal of Education,* 1975, *157,* 17-24.

Whiteman, M., & Lukoff, I. A factorial study of sighted people's attitudes toward blindness. *Journal of Social Psychology,* 1964, *64,* 339-353.

Wolf, R., & Simon, R. Does busing improve the racial interactions of children? *Educational Researcher,* 1975, *4,* 5-10.

Peer and Cross Age Teaching: Promoting Social and Psychological Development in Mainstream Classes

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With the advent of the new mainstream legislation it is necessary to promote a substantial educational policy change to positively implement the law. As the nation's classrooms move from exclusion to inclusion of increasingly more diverse populations, massive shifts in educational practice are needed. Mainstream education and its operational translation, namely, to increase the accommodative capacity of each classroom, simply will not work if it results only in small adjustments to current classroom practices. By adding bits and pieces of new information to the current classroom interactions we will simply experience one more time the old French proverb that the more things change the more they remain the same. In this chapter, the basic assumption is that the instructional capabilities of classrooms need the equivalent of a quantum leap—a new conception or a qualitative shift—to meet the new demands and needs for mainstream education. Thus, the focus is on (a) new goals for education and (b) new instructional strategies; both will benefit not only recently mainstreamed children but, also, all school children.

TRADITIONAL SCHOOLING

In the old and to some extent still current view of education in the classroom the assumption is that each teacher is a Toscanini or Sarah Caldwell, that is, each teacher has the ability to orchestrate individual differences, the different needs of clusters of children, and the different demands of the curriculum. Horace Mann noted over a century ago, "As is the teacher, so is the classroom." In this view, the teacher is the architect for each child's entire educational experience.

The responsibility for instruction, for the organization of curriculum materials, and for the transmission of knowledge and attitudes ultimately rests in the hands of each teacher. Another way to view this conception of the classroom is through the metaphor of a Charles Atlas model: The work of each classroom rests solely and exclusively on the shoulders of each teacher.

In reality, of course, such a view does not work. Studies of classroom interactions over the past 70 years have indicated clearly that the teacher simply cannot function as the orchestrator of all learning activities. In most classrooms, the activities of the pupils are passive or mindless or a series of minor routines with small point or consequence. Teachers tend to spend an inordinate amount of classroom time in directing children; 65 to 75% (estimates vary) of all classroom talk is by the teacher, and at least two-thirds of that talk is in the form of asking for short, rotelike pieces of information or giving procedural directions (Sprinthall, 1977). Other studies have shown that the general curriculum—the content of what is being taught in most classrooms—tends to be equally pedantic, in the form of a recitation of facts (Sprinthall, 1978). Clearly, not all children benefit from such classroom interactions. It is also clear that when handicapped children are brought into conventionally organized classrooms they receive an even smaller proportion of actual positive teaching time than their regular class colleagues. The McDermott and Aron study (1978) of a classroom indicated that students in the lowest reading group (some with learning handicaps) were interrupted for procedural as opposed to pedagogical reasons almost 40 times in one 30 minute reading session. These children obviously were given little chance to read.

> Not only do they spend time calling on the teacher for a turn, they also spend time waiting for the teacher while she attends to some members of the top group who have interrupted the time on task of the bottom group. Almost two-thirds of the time in the reading lesson is spent in either getting a turn or waiting for the teacher to attend to the group. (McDermott & Aron, 1978, p. 57).

As new children enter the mainstream, it is important to rethink the educational objectives of schooling as well as instructional techniques. Without restructuring, mainstream education will not work any better than the old exclusion/ segregation/deviant status placement model.

NEW GOALS: SOCIAL AND PSYCHOLOGICAL DEVELOPMENT

It is becoming increasingly obvious that a major educational goal of schooling should be the promotion of healthy, psychological development in all pupils, that is, the stimulation of each individual's psychological maturity, sense of personal confidence, and successful interpersonal development. Such goals, of course, are not new except that schools traditionally have relegated psychological development to an inferior status in terms of curriculum and activities. Generally, schools make policy statements on the importance of personal and psychological development but they do not provide curricular space to promote such development. It is now clear, from a series of studies conducted during the past decade, that by neglecting these personality domains we are shortchanging the futures of all children; success in life, or life skills, come from or are a function of the level of a child's psychological maturity and his or her academic achievement. However heretical it may sound, grade point achievement correlates only to further grade point achievement and does not predict success in any of a variety of life skills after formal education. Content mastery predicts only to further content mastery but not to successful adult performance (Heath, 1977; Kohlberg, 1977; McClelland, 1973). The myth that academic achievement and content acquisition should be the major objective of schooling is, of course, longstanding and a strongly supported delusion.

The educational goal of academic achievement becomes more and more like an Alice in Wonderland fantasy. Alice asked the Mock Turtle about the regular course in the school he had attended. " 'Reeling and Writhing, of course, to begin with, the Mock Turtle replied; 'and then the different branches of Arithmetic—Ambition, Distraction, Uglification, and Derision.' . . . . 'What a curious plan!' exclaimed Alice" (Carroll, 1960.pp. 129-130).

Oh what a curious plan indeed for schools to continue to push for a singular focus on content acquisition and academic achievement instead of promoting psychological and social development for all children. Stimulating a sense of interpersonal competence, the ability to relate effectively to peers and to interact with them productively, and similar variables need special attention in educational programs. At the present time "regular" children do not benefit from traditional classroom curricula when *benefit* is defined to include psychological development.

Studies conducted during the past 25 years indicate that segregating special education children into separate classes does not yield social benefits. Unfortunately, simply placing children from previously segregated classrooms into regular classrooms is not a benign activity. A recent study by Bruininks (1978) showed that in such an instance the regular class children develop increasingly more negative attitudes toward the mainstreamed children, which means that social engineering through desegregation will not work automatically. Indeed, bringing diverse groups together without adequate educational plans more likely will have negative effects on both groups.

NEW INSTRUCTIONAL STRATEGIES

To create a more facilitative educational environment, programs should be created that will stimulate the psychological as well as intellectual development of children. Role taking theories provide increasing evidence that placing children or teenagers in genuine role taking situations stimulates personal growth and development. Actual role performance, not role playing, is indicated. The concept, which is derived from George Herbert Mead's classic work in role taking theory, urges children and adolescents to actually participate in fully responsible new roles (Mead, 1934). This does not mean the use of simulation or "games" in classrooms but, rather, real world activities, such as instructional responsibility for other children.

The idea of employing pupils as teachers is not new in itself; what is new is how this strategy can be employed for the benefit of all groups in the classroom. The concept is simple. Many years ago, Bloom's taxonomy indicated that a most effective learning strategy is for pupils to apply knowledge to real world situations. Ralph Tyler's classic studies of the permanence of learning in the classroom provided a rigorous empirical basis for such claims. In fact Tyler found that pupils traditionally forgot 50% of content acquisition after 1 year and 80% after 2 years; in these classrooms, the learning activities were not applied (Tyler, 1933). More recent studies by Gartner, Kohler, and Riessman (1971) and Paolitto (1976) indicate that pupils who act as tutors benefit at least as much as the pupils they tutor in terms of learning activities and learning outcomes.

In a series of studies at the University of Minnesota, we have been able to document the positive outcomes of cross age teaching programs. At the elementary school level, studies by Blum (1978), Enright (1978), and Preuss (1976) showed the positive impacts upon levels of psychological maturity that accrued when children took the role of teachers; studies by Cognetta and Sprinthall (1978), Exum (1977), and Leone (1978) indicated the positive impact on teenagers. Essentially, in all these studies, pupils are placed in the role of teacher and then systematically instructed in processing the experience as well as in learning important teaching skills. There is a significant theoretical as well as empirical justification for the use of such activities. The benefits go both ways. For children who act as teachers, there is an increase in their level of psychological maturity. They develop a greater sense of empathy, individuality, interpersonal maturity, and personal competence. Thus, in answer to the question, "Do such programs rob Peter to pay Paul," the answer is a clear and emphatic "no." The tutors themselves benefit directly through increased levels of psychological maturity and leadership. For the pupils tutored, on the other hand, the benefits are also significant, but in a somewhat different realm. Since the tutors spend more time on the learning task because of the amount of individual attention that can be applied, the tutees receive more practice and, under appropriate conditions, can learn in a less threatening environment. Thus, both the child who teaches and the tutee who learns in such a cross age program achieve significant gains, and the teacher is no longer exclusively responsible for all of the learning activities in the classroom.

It is most important to note, however, that all the studies cited here indicate clearly that such procedures do not work without a serious commitment of time and supervision by the school staff. There is a romantic view that education occurs simply through a magical process, a youthful Mark Hopkins and a log. To the contrary, we have found that weekly seminars in which both teaching techniques and discussion designed to help the tutors process their own experience are an absolute necessity. Role taking in practice and a weekly seminar for tutors are essential. Such supervision sessions provide the time for pupils who are engaged in teaching to examine readings, practice new techniques, discuss some of their emotional reactions, view some of their teaching activities through the use of technology (e.g., video and audio playbacks), and the like. In the curriculum guide presented in the next section of this chapter, concrete examples are provided of activities and processes that occur in these weekly discussion sessions with the pupils.

By holding weekly supervision sessions with children and/or adolescents who are teaching, the learnings can be affirmed. Experience by itself does not necessarily lead to further learning. We have found, for example, that simply placing children or adolescents in tutoring experiences by themselves does not stimulate positive development for either group. Why is this so? It would seem from all the current talk about experience based learning and so called action learning programs that simply placing children in such activities would produce positive outcomes. On the other hand, our studies indicate that, without the guided reflection, pupils do not necessarily gain anything at all from experiential learning. In other words, without the opportunity to carefully reflect upon one's own experience in a new and more expansive role, an individual will not necessarily develop new understandings of self and others as a result of the experience. In fact, in one cross age teaching program, with regular pupils tutoring other pupils, we found the tutoring-only program simply produced no effects at all. The tutors showed no gains on estimates of development (Exum, 1977). It was a case of ships passing in the night, so to speak. However, in the case of children tutoring recently mainstreamed pupils, the results were negative; that is, children who were in a tutoring-only group developed more negative attitudes toward the mainstreamed children and employed greater criticism in their teaching techniques when compared to their initial teaching strategies (Blum, 1978). Perhaps the meaning of this is obvious: placing pupils in difficult learning activities, such as teaching designated educable mentally retarded or trainable mentally retarded children, without careful supervision, may induce negative learning outcomes. We should bear this finding in mind before any small or large scale cross age teaching program is considered for school systems.

A specific outline of activities designed to help implement such a plan follows. The outline itself, of course, is not prescriptive but rather suggestive of the kinds of activities and processes that may improve a design for cross age or peer tutoring with recently mainstreamed children. The program was tested with regular elementary children learning to tutor trainable mentally retarded children. Readers should feel free to make adjustments according to both grade level and/or type of exceptionality.

SUPERVISING TUTORS: A CURRICULUM GUIDE

The objectives of these procedures were two fold: (a) to teach skills and (b) to help the tutors to process their own experiences. To accomplish these objectives each session had the following format: an initial review of the previous week's skill; introduction of a new tutoring skill; demonstration of the new skill; role playing by the tutors of the new skill; reflection and problem solving. Overall, the curriculum was divided into the two major themes of skill training and process experiencing. Since the children were to accept major responsibility for taking care of and interacting with children who were vastly different from themselves (in this case, previously segregated trainable mentally retarded students), the focus of the curriculum at the outset was both highly structured and concrete. There is strong theoretical support from child and adolescent developmental theorists to suggest that both firm structure and concrete directions are important to mastering new learning activities, especially under conditions of high anxiety. It was clear that asking children to learn to interact with the handicapped children met both conditions. As a result, the first six lessons centered on specific techniques to be used while tutoring (based on the Flanders Interaction Analysis System, see Table 1); the last four lessons centered on experiencing the handicapped condition.

Beyond skill training, an attempt was made during training sessions to acknowledge the difficulty of befriending a handicapped peer. The threatening experience was desensitized into a learning opportunity. An espirit de corps was nurtured whereby it was safe to use the training session to "try on" new social behaviors and to express new ideas. This attitude was accomplished through role taking with peers in the supervision group followed by a discussion session. Problem solving, whereby the children advised and counseled one another in alternate approaches to playing with the tutees, was always included. The role of the group leader (classroom teacher) was to generate questions and encourage the tutors to help one another to deal with tutor-tutee problems. Through this "experience plus reflection" approach, a support mechanism was created to capitalize on the overall role taking experience.

TABLE 1
Categories for Flanders Interaction Analysis*

Teacher Talk

Indirect Influence

1. *Accepts feelings:* accepting and clarifying the tone of the students' feelings in an unthreatening manner. Feelings may be positive or negative. Predicting or recalling feelings are included.
2. *Praises or encourages:* praising or encouraging student action or behavior. Jokes that release tension, but not at the expense of another individual, nodding head, or saying "um hm?" or "go on" are included.
3. *Accepts or uses students ideas:* clarifying, building, or developing ideas suggested by a student. As teacher brings more of his or her own ideas into play, shift to #5.
4. *Asks questions:* asking a question about content or procedure with the intent that the student answer.

Direct Influence

5. *Lecturing:* giving facts or opinions about content or procedure; expressing his or her own ideas, asking rhetorical questions.
6. *Giving directions:* giving directions, commands, or orders with which students are expected to comply.
7. *Criticizing or justifying authority:* making statements intended to change student behavior from unacceptable to acceptable pattern; bawling someone out; stating why the teacher is doing what he or she is doing; extreme self reference.

Student Talk

8. *Response:* talk by students in response to teacher. Teacher initiates the contact or solicits student statement.
9. *Initiation:* talk initiated by students. If "calling on" student is only to indicate who may talk next, observer must decide whether student wanted to talk.

10. *Silence or confusion:* pauses, short periods of silence, and periods of confusion in which communication cannot be understood by the observer.

Source: N. A. Flanders. *Analyzing teaching behavior.* Reading MA: Addison-Wesley, 1970.

*In the Blum (1978) study, the trained tutors showed dramatic and statistically significant improvement in their use of "model" teacher categories (Indirect #1, 2, 3, 4 plus direct #6). The untrained tutors did not develop model teaching skills; instead, there was an increase in category #7—criticizing or justifying authority. The effects on the trainable mentally retarded tutees were difficult to measure. There was, however, a decrease in Category #10, Silence/Confusion, for trainable mentally retarded students with trained tutors. There was no change in this category for trainable mentally retarded students with untrained tutors.

PART I: SKILLS FOR TUTORING

Lesson 1: Orientation

Objective: To introduce the children to each other and to underline the importance of their roles as tutors; to discuss the similarities and differences between themselves and the handicapped children, and to model/practice some role taking elements.

Materials: Blackboard, blindfolds, blocks of varying shapes (10 for each pair of children).

Plan:

1. Teacher introduces self to the children and learns everyone's name.
2. The teacher asks for a volunteer to write on the blackboard. The teacher describes tutoring as a very important role: the tutors may be some of the first nonhandicapped playmates for the special class children. The teacher asks the tutors to think of similarities and differences between themselves and the special class children. The teacher encourages them to talk about differences in physical appearance, slower learning ability, and immature social skills. Then, the children are asked to describe the similarities. The teacher encourages them to think that the special class children *can* learn and do have feelings, even though they act much younger than their real ages. (The behavior of the special class children in this sample could be compared to that of preschoolers.) The teacher should accept all the ideas expressed by the group members and try to rephrase the statements in a supportive manner so that all can be written on the blackboard. The teacher concludes that we all learn, but the special children have special problems in learning.
3. The teacher explains the role taking practice. The teacher asks the children to choose a partner. The concept is explained: every meeting will have a practice session in which each person will take turns acting as tutor and tutee.
4. The exercise is explained. A "practice" is introduced as a way to experience what it is like not to be blind, but to have poor eye-hand coordination. *Eye-hand coordination* should be explained in nontechnical language: the eyes see something and send a message to the hands to touch. For trainable mentally retarded children, the message from the eye to the hands may get short circuited. The hands may not do what they should. Using a blindfold is a way to approximate this experience. One partner should be the tutor and one, the tutee. The tutee wears a blindfold. The tutor can give only

verbal directions to the blindfolded tutee to build a tower out of the blocks. *Videotaping this exercise is extremely helpful.*

5. After both dyad members role play, the children are asked to reconvene. The group leader asks the following questions to stimulate discussion:

- What was it like to tutor a handicapped person using only verbal directions?
- What was it like to try to build a tower without being able to see?
- How did it feel to be given only verbal help? Was it frustrating?
- What do you have to do to give good directions to someone who has a hard time with blocks and puzzles? The teacher should encourge many ideas to alter the communication: speak more slowly, give more verbal clues, use shorter phrases.
- Should you give more help than you did? What kind of help? The teacher should encourage them to talk about "hands on" help.

Lesson 2: Direction Giving

Objective: To show how to give clear, simple verbal directions accompanied by "hands on" help.

Materials: One game per dyad typical of those used with the trainable mentally retarded children.

Plan:

1. The teacher asks for a volunteer to recall the previous lesson's discussion (that the handicapped students are learners, but on a slower level, and that they have feelings). The teacher asks for volunteers to describe the kind of directions one must give to a trainable mentally retarded child. The teacher asks for a volunteer to demonstrate and emphasize such directions using the following techniques:

- Slower talk; one or two syllable words.
- Simple: use one idea at a time.
- Use few words, for example, "Give me the blue block."
- If the special class buddy has trouble, give "hands on" help.

The teacher should model both correct and wrong ways to use these four techniques.

2. After modeling the techniques with a volunteer, the children are asked to pair up with friends and to role take, using one of the games. The teacher circulates, praising anyone loudly for using any of the four techniques, and modeling the appropriate behavior

when necessary. The teacher tells the children to switch roles after 3 to 5 minutes.

3. After the practice, the group reconvenes. The children are asked the following questions to stimulate discussion:
   - Did you hear your tutor give good directions? What did the tutor do?
   - Did you have any advice for your tutor for giving better directions?
   - Was it easier for the tutees with good directions?
   - Can you picture how this would work with your special class buddy?
   - Are there any problems with your special class buddy that the group can help you with?

It is recommended that questions be asked of specific students, rather than thrown out to the group in general. The latter tends to be received with silence. In addition, restate all student criticisms of each other in a positive way, i.e., from "He told me to do too many things at once," to "So you think John could try giving one direction at a time." The teacher should also try to make one positive statement about every student's performance and to scatter these statements throughout the discussion.

Lesson 3: Positive Feedback

Objective: To discuss the use of praise in increasing the tutee's performance level and building his or her self esteem; to discuss other techniques to build the tutee's attention span.

Materials: Games from the special classroom.

Plan:

1. The teacher describes clear directions as one way of helping the special class buddy to understand; if they are helpful, they should make him or her feel good about playing with the tutor. The teacher then reminds the children of how difficult it was to learn when they were blindfolded in the first lesson.
2. The group brainstorms ways that the special class buddies show frustration, such as giving up easily or throwing tantrums. (The expression will vary, of course, with the social skill levels of the handicapped children.) The teacher introduces the importance of the tutor's role in encouraging the special class buddies to feel more positive, less frustrated. The teacher asks for ideas on how to be encouraging, generating a list of types of praise (i.e., "very good," etc.)

The teacher then introduces one other idea: in presenting game materials, the tutors should cut down on the amount of game materials so as not to confuse the child with too many stimuli. Examples are, give the tutee one puzzle piece at a time, keeping all other pieces off to the side; do not place all the puzzle pieces within the child's reach, which would confuse him or her. If given too many stimuli, frustration type behaviors will occur, such as throwing pieces or grabbing several pieces at once. *A tutor principle should be suggested at this point: The tutor should plan in advance to simplify both the communication and game materials according to the needs of the tutee.* The teacher then demonstrates this principle with a volunteer.

3. The children form dyads and role play these skills with the games. The teacher circulates among the dyads, again praising those who give clear directions, demonstrate praise, and simplify the games.
4. After both children have had a chance to take each role, the group reconvenes. The children are asked to give feedback. The following questions are suggested to encourage discussion:

- Did your tutor use any praise when you were playing? What did he or she say and how did it make you feel?
- How did you, as the tutor, feel when you used the praise?
- What did your tutor do to simplify the game?
- What advice can you give your tutor for his or her praise and simplifying the game?
- Did your tutor give good directions as we discussed last time?
- What are ways to make directions good?
- Can you picture doing this with your special class buddy?
- Are there any special problems that the group can help you with?

Lessons 4 and 5: Dealing with Behavior Problems; Poor Attention to the Play Situation

Objective: To introduce the importance of simple directions and praise to build attention; to show how to use various techniques to gain and keep the tutee's attention.

Materials: Games from the special classroom.

Plan:

1. The teacher acknowledges the behavior problems often seen with the tutees. The teacher encourages a gripe session in which the children can vent their own frustrations and fears. The teacher should be supportive of the tutors without disparaging the special

class children. Without structure, griping could monopolize the entire session. The teacher will have to guide the discussion so there is time left to demonstrate to the tutors that there are specific techniques they can use to prevent many of the behavior problems. The teacher introduces these techniques and they are practiced. The remaining skills are introduced. Techniques for gaining cooperation are as follows:

- If the tutee looks away or gazes off, the tutor should try to discover if the tutee finds the task too hard or simply needs clearer directions.
- To aid in getting the tutee's attention, the tutor could touch his or her arm or cheek and guide his or her hands through the motion of the game.
- It is important to guide the tutee's hands, not the game parts.
- Brainstorm about the tutor's feelings about touching the hands, arms, or face of the special class kids.
- If these tactics are successful in gaining the tutee's cooperation, the tutor should praise him or her.

If these techniques do not work, the tutor should try changing games. The tutor needs to be aware that, like younger children, the special class child's attention is short; therefore, games should be changed frequently.

If none of these techniques works and the tutee is acting out, the tutor could try to continue playing the game and to let the tutee know that it is fun. In this way, rather than pursue and attend to the misbehaving tutee, the tutor pursues the game. Often, the tutee will become more interested in the object of the tutor's attention.

If these suggestions do not work, it is time to return the tutee to his or her class. In a crisis situation, in which physical abuse is a danger, the tutor should not try to cope with the tutee but should get the teacher.

2. The teacher should demonstrate each technique with a volunteer, showing the correct and incorrect ways of using each.
3. The teacher should ask the tutees to role play some level of behavior problem (i.e., gazing off, throwing game pieces, walking away from the game, refusing to cooperate). The teacher should circulate among the dyads, praise the tutors for applying the techniques, and demonstrate for the tutor who is not performing correctly. The teacher should not criticize but should redirect the tutor through demonstration.
4. Once the tutors have played each role, the group should reconvene. The following questions are recommended to stimulate discussion:

- Did your tutor use any of the special techniques when you misbehaved? Which ones, and how did they work?
- Which technique worked best?
- How would these techniques work to cut down on behavior problems with your special class buddy?
- How do you feel about stepping in and trying to do something about a problem? Are you a little afraid?
- How do you feel about asking for help from the teacher if your buddy starts to tantrum? (The children often say that they think the teacher will think they are incompetent. Brainstorm these feelings. Explain that teachers have supervisors to whom they go for help and watch the children's amazement at this information.)
- Are there any special problems that the group can help you with?

Lesson 6: Never Say "No"/or Hardly Ever

Objective: To show how to demonstrate and redirect behavior rather than to use criticism.

Materials: Games from the special class, especially those with geometric shapes or color cubes.

Plan:

1. The teacher asks the children to report on the use of the techniques in dealing with behavior problems. The teacher asks the other children for counsel, such as, "Can anyone help Mary think of what to do?" This type of discussion will require frequent support from the teacher along the lines of, "I hear you're trying new behaviors and you're having some problems; it is hard to play with someone who hasn't yet learned to play and that's good that you keep trying new ways to help."

   The teacher then introduces the idea that often the special class child is not trying to be "naughty," he or she just has not learned other ways of behaving. So instead of criticizing mistakes, the tutor can demonstrate the correct way. The teacher models how to correct behavior with a volunteer and tells the volunteer to make mistakes. The teacher role plays criticism behavior as well. Here is an example: Holding a red and blue block in front of Mary, say, "Mary, give me the red one." (Mary chooses blue.) "Mary, this is the blue block. Here is the red block. Now give me the red one." Therefore, the request is followed with a demonstration of the correct response, and then the request is restated.

   The teacher then says to the tutors, "Can you never say no?" This axiom is very appealing to the children; on the other hand, the teacher should explain that one should use negatives when the special class child is harming himself or herself or others or damaging property, and/or when it is impossible to gently yet firmly physically restrain the child. Nevertheless, less serious mistakes warrant redirection, not criticism.

2. The children pair into dyads and role play while the teacher circulates giving praise and redirecting. *The teacher must model this "never say no" behavior now and at all times throughout the training.*
3. After each child has taken the role of tutor and tutee, the group reconvenes. Following are some questions recommended to stimulate discussion.

- It's very hard to never say "no." Did you hear your tutor criticize you?
- As the tutor, how did you do trying to correct mistakes instead of criticizing mistakes?
- Do you think this will work with your special class friend?
- Are there any special problems that the group can help you with?

Lesson 7: Review of Techniques

Objective: This lesson provides a buffer for further practice in and discussion of dealing with behavior problems, particularly if lessons 4 and 5 did not provide enough time to role play the techniques. In that case, lesson 6 would provide this opportunity, and lesson 7 would be the "never say no" lesson.

PART II: EXPERIENCING THE HANDICAPPING CONDITION

Lesson 8: Language Disability

Objective: To experience how to communicate with one who has a very low level of language comprehension and expression.

Materials: Simple books.

Plan:

1. The teacher introduces the idea of trying to read to the special class buddy when his or her level of understanding is below that of most books. The teacher brainstorms various techniques the children could use, encouraging them to think of changing the text to "meet the needs of the listener." The teacher models this idea with a

volunteer, showing how to shorten sentences and simplify the story line.

2. The children form dyads and take turns reading to each other. The teacher circulates among the dyads and praises those who are modifying the story in the book.
3. The group reconvenes. The following questions are recommended to stimulate discussion:

- It really bothers a lot of people that special class kids do not know how to play a game by the rules. They do not seem to care if all the puzzle pieces are in the right place or they are very messy about it. Does that sort of bug you as a tutor?
- Does it bug anybody that you have to work very hard to change a story when you read a book to them?
- What should you do: teach your buddy how to play the game by the rules, or change the rules so that they are easy enough for your buddy to understand?
- Any problems since our last meeting that the group can help you solve?

Lesson 9: Multiple Handicaps

Objective: To experience what it is like to be limited in coordination.

Materials: An obstacle course made of some chairs and tables fashioned like a maze.

Plan:

1. The teacher introduces the idea of trying to help someone find his or her way through a maze when he or she has multiple handicaps, poor understanding of language, and poor vision. The teacher asks for volunteers to act handicapped. Then the teacher divides the other tutors into two groups. One group is taken outside the room. The teacher instructs this group to be very vague when they give directions to the blindfolded persons, modeling the type of vague instructions. No direction is given to the remaining tutors. The two groups of tutors are rejoined and are ready to instruct the blindfolded "handicapped" tutees.
2. The tutors direct the handicapped tutees through the maze one at a time. The teacher says nothing and the children do not switch roles.
3. The group reconvenes and the blindfolds are removed. The teacher asks if anyone can guess the secret message given to one group of tutors. The following are recommended questions for discussion:

- How did you feel being guided by your tutor? If you were tutored by someone in the secret message group, did you notice the difference between his or her directions and those of the other tutors? How did the different types of directions make you feel?
- Encourage the tutees to discuss their frustration at having to depend upon someone who is vague and confusing. A question along this line is, "Try to imagine growing up with these handicaps and wanting to go out in the world on your own. How would you feel?"
- If you had to get help from other people in order to survive, what kind of help would you want? Would you want a helper to do a lot of things for you? Encourage the children to talk about helping handicapped people to learn how to be independent. This abstract concept can be made more concrete by discussing specific situations, such as making a phone call alone, riding a city bus alone, going to the store alone to buy food.
- Does anyone think that his or her special class buddy will ever be able to do some things for himself or herself when grown up?
- What can you do now to help your buddy to learn how to do things for himself or herself?

Lesson 12. Coordination Handicap—Gross Motor

Objective: To help the children to understand what it is like to have such a disability.

Materials: A balance beam, a skate board, or any other equipment requiring coordination.

Plan:

1. The teacher introduces the idea of experiencing what it feels like to have poor balance like many of their special class buddies. The children often ask why so many of the special class children are so "wobbly" and "run funny." One concrete explanation was offered by a fourth grader who said, "Feet move when they get a message from the brain telling them to. The message for those kids is all mixed up."
2. Once again, the teacher asks half the children to volunteer to be blindfolded and the other half to act as tutors. The tutors are directed to take their tutees to each piece of equipment. The function of the tutors is to hold the hand of the tutee to prevent accidents. The teacher says nothing. After 3 to 5 minutes, the tutors switch roles.
3. The group reconvenes without blindfolds and discusses the experience. Some possible questions follow:

- The teacher tells the group that no specific instruction was given to the tutors in how to be helpful. Were the tutors encouraging to the blindfolded tutees?
- How did it feel to be the handicapped person?
- Any questions left untouched in the previous discussion can be included in this discussion.
- If you were pretty wobbly on your feet, do you think you would go out for sports? (Most kids say "no.") Has anyone noticed that the special class buddy does not like to climb on the jungle gym or jump jope, but that he or she really likes to ride the swing or wagon? (Encourage the children to see that the first activity requires balance but the second does not.)
- If your special class buddy shys away from these things because of poor balance, should you force him or her to play on these things? (Encourage the children to learn that balance can improve to some degree with exercise and practice, and that the tutors can be supportive by trying to make the equipment less threatening by being encouraging.)

Lesson 11: Fine Motor Handicap

Objective: To experience a fine motor handicap.

Materials: Jackets that zip; shirts that button; pants that snap; crayons and paper; tape.

Plan:

1. The teacher introduces the idea that many of the special class kids have a similar handicap in using their fingers as they have with wobbly balance: The message from the brain to the fingertips is a little mixed up. Therefore, they are slower to learn how to do things, such as button, snap, zip, and draw or write. To experience what it would be like to have this impediment, the teacher wraps a volunteer's fingers together, leaving the thumb free. Then the teacher demonstrates that many of the special class kids are most efficient when using the pincer grasp, an early reflex. The way the children's hands are taped allows only a pincer grasp.
2. The children whose hands are taped are given the buttoning, snapping, zipping, and drawing to try with the tutors. The teacher says nothing but signals time when the children should switch roles and the other children's hands are taped.
3. The group reconvenes after both groups have had the opportunity to take each role. Questions recommended to generate discussion follow:

- How does it feel to have this handicap?
- Is it frustrating to help someone who is handicapped like that? What did you find that you had to do to help the tutee?
- Does anyone here have pretty bad handwriting? Encourage the children to see that some children are much better in fine motor skills than others, that we all have strengths and weaknesses. Ask the children if they have any particular skill they can do better or worse than someone else.

Lesson 12: What Did You Learn?

Objective: To encourage discussion about the total experience. This could be the time to administer a survey if desired.

Materials: Snacks and drinks

Plan: The teacher tells the children how much fun it has been to see them grow through their experience. One technique used to encourage discussion was to go around the group asking each student to complete a sentence starting with a stem which the teacher makes up spontaneously as each child's turn comes up. Some items are, I learned how to . . . ; I liked . . . ; I didn't like . . . ; I worried about . . . ; Now I know that. . . . After the kids become accustomed to the game, one child can give another a stem, and then that child can give another a stem, and so on.

Often, children will produce remarkably insightful comments as they process their overall experiences. Generalizations, such as, "You know, in some ways we are all handicapped . . ." or "By helping others I'm learning about myself . . ." or "Those kids are people, too." Volunteered statements may not carry as much empirical weights as do official research reports but such comments may be more genuine indicators of outcome. In either case, the evidence to support the efficacy of cross age and peer teaching comes from both sources—objective, empirical evidence and subjective, clinical data.

IMPLICATIONS

Effective cross age programs require two sets of role shifts. The teacher needs to develop supervision techniques to give his or her teaching skills away to the pupils. For the pupil-tutors, the role shift requires them to move from passive to active learning, from "studenthood" to a responsible helping and caring role, from dependence to independence. For recently mainstreamed pupils, of course, the benefits are most obvious: individualized attention, more time on learning tasks, and genuine social interaction with regular class peers. The change in social interaction patterns of classrooms may be by far the most important shift in the entire context for all participants. Peer and cross age caring programs inevitably change relationship patterns. Isolation is reduced while interdependence is increased. Under such conditions all children may grow at their own pace toward useful adult roles.

At a generalized level, peer and cross age helping programs can operate across a variety of areas. For example, students can role take as helpers in preschool programs. Gouze (1975) and Greenspan (1974) both developed programs for secondary pupils as helpers in nursery schools. In fact, in the Gouze study, some physically handicapped secondary pupils from a mainstreamed high schoool joined their "regular" peers in supervising the nursery school children. Activities included having the preschoolers climb in and out of a high schooler's wheelchair and making friends with "a big person who has wheels for legs." Other programs that tested this role taking approach have included secondary pupils as peer and cross age "counselors" (Dowell, 1971; Rustad & Rogers, 1975). The similarity across all of these efforts is that each program includes a balance between real experience—the actual role taking—and a careful discussion or "seminar" (as the pupils like to call it) to review the past and plan for the future. On the other hand, it is important to restate that such learnings do not automatically accrue from experience.

Dewey (1933), indicated that experience by itself can be educative or, just as likely, miseducative. Anne Bancroft's experience in the movie portrayal of Helen Keller's tutor is clearly qualitatively different from, say, washing a car. Obviously, not all experience is similar. Learning to help and care for another human is potentially an extremely important educative experience. However, and this is the part of Dewey that is and was overlooked, experienced by itself it is not enough. Dewey pointed out long ago, and all present day developmentalists agree, that careful, rigorous, hard headed analysis must go hand in hand with experience. Thus, we are not advocating the equivalent of cafeteria style neoprogressive education. That was a light weight translation of developmental education assumptions. Instead, the need is for systematic examination of experience in order to extract meaning for growth and development.

One of our high school pupils from a prior study was teaching a hearing impaired child to "sign." We had asked her to keep a journal of reflections throughout the term. She also did some reading (excerpts from *Dibs, Teacher*, etc., on the positive side, and *Catcher in the Rye, Nigger*, etc., on the negative side). At the end of the course she reported that she learned to like the child and felt good about her own growing ability as an instructor. Most of all, she noted, it was reviewing her journal that had the greatest impact. In retrospect, she could see where she had been, what she had learned, and how she had changed. Her journal "was almost like a mirror. I could look into it, think about what I'd said, and it would reflect my thoughts back. Only I'd see it a little differently each time."

For mainstream education to succeed, we need thoughtful and empathic teachers and pupils, together as resources. Most of all, we need helpers who can learn from actual experience in order for all children to reflect and grow.

REFERENCES

Blum, L. T. *A model of transition mainstreaming: A cross-cognitive tutor program.* Unpublished doctoral dissertation, University of Minnesota, 1978.

Bruininks, V. Actual and perceived peer status of learning-disabled students in mainstream programs. *Journal of Special Education*, 1978, 12(1),51-58.

Carroll, L. *The annotated Alice: Alice's adventures in wonderland and through the looking glass.* New York: Bramhill House, 1960.

Cognetta, P. V., & Sprinthall, N. A. Students as teachers: Role taking as a means of promoting psychological and ethical development during adolescence. In N. A. Sprinthall & R. L. Mosher (Eds.), *Value development as the aim of education.* Schenectady NY: Character Research Press, 1978.

Dewey, J. *Experience and education.* New York: Collier, 1933.

Dowell, R. C. *Adolescents as peer counselors.* Unpublished doctoral dissertation, Harvard University, 1971.

Enright, R. E. Promoting interpersonal and moral growth in elementary schools. In N. A. Sprinthall & R. L. Mosher (Eds.), *Value development as the aim of education.* Schenectady NY: Character Research Press, 1978.

Exum, H. Deliberate psychological education: Facilitation of psychological maturity at the junior college level. In C. D. Miller (Ed.), *Developmental theory.* St. Paul MN: State Department of Education, 1977.

Gartner, A., Kohler, M. C., & Riessman, F. *Children teach children: Learning by teaching.* New York: Harper & Row, 1971.

Gouze, M. *Empathy training for preschoolers and adolescents.* Unpublished doctoral dissertation, University of Minnesota, 1975.

Greenspan, B. *Facilitating psychological growth in adolescents through a child development curriculum.* Unpublished doctoral dissertation, Harvard University, 1974.

Heath, D. *Maturity and competence.* New York: Gardner, 1977.

Kohlberg, L. Moral development, ego development, and psychoeducational practice. In C. D. Miller (Ed.), *Developmental theory.* St. Paul MN: State Department of Education, 1977.

Leone, P. *Cognitive development and the college student paraprofessional.* Unpublished doctoral dissertation, University of Minnesota, 1978.

McClelland, D. C. Testing for competence rather than for intelligence. *American Psychologist*, 1973, *28*, 1-14.

McDermott, R. P., & Aron, J. Pirandello in the classroom. In M. C. Reynolds (Ed.), *Futures of education for exceptional children.* Reston VA: The Council for Exceptional Children, 1978.

Mead, G. H. *Mind, self and society.* Chicago: University of Chicago Press, 1934.

Paolitto, D. P. The effect of cross-age tutoring on adolescence. *Review of Educational Research,* 1976, 46(2), 215-237.

Preuss, J. *Process evaluation in a seminar-practicum course to promote psychological development.* Unpublished doctoral dissertation, University of Minnesota, 1976.

Rustad, K., & Rogers, C. Promoting psychological growth in a high school class. *Counselor Education & Supervision,* 1975, 14,277-285.

Sprinthall, N. A. Psychology and teacher education: New directions for school and counseling psychology. *Counseling Psychologist,* 1977, 6(4), 53-56.

Sprinthall, N. A. Mainstreaming and teacher re-education: A rationale for reform. In J. K. Grosenick & M. C. Reynolds (Eds.), *Teacher education: Renegotiating roles for mainstreaming.* Reston VA: The Council for Exceptional Children, 1978.

Tyler, R. Permanence of learning. *Journal of Higher Education,* 1933, 4, 203-204.

Creating Positive Classroom Environments

RICHARD HLIDEK

The greatest concern with the schools among educators and the general public today, as reported by the National Education Association, Gallup Poll, *Phi Delta Kappan*, and many popular magazines, centers on unacceptable student behavior. Reports of violence, destruction of property, and the assaulting of teachers are common occurrences in schools throughout the country, and the finger of blame frequently is pointed at the student. In order to combat this problem, the major emphasis is directed toward "fixing" the disruptive child or teenager. These efforts take the form of special programs, classrooms, and schools which necessitate identifying individuals and labeling them. Some common labels are "emotionally disturbed," "socially maladjusted," "disruptive," and so on, depending on the particular locale. The "Band Aid" approach is the operation of the day; however, fixing the kid must be approached with great caution as the following excerpt from "Weeds and Other Living Things" illustrates:

> A weed is anything alive and growing which you do not like. There are no weeds in a meadow.
>
> Gardens do have weeds, as do cornfields and lawns. But gardens, cornfields, and lawns are all imposed conditions on what would be an otherwise spontaneous ecology. In gardens, cornfields, and lawns we are compelled to pull the weeds. Or, as is becoming more popular, to spray them with stuff that kills everything in sight. In meadows it is sometimes difficult to tell what is a weed and what is not, so we are less compelled to pull the weeds and more inclined to view the meadow as a place where weeds and non-weeds coexist, each contributing to the meadow's

> ecology. Only in imposed ecologies do weeds exist, and then only by definitions based on preconceived notions of what the ecology should be like.
>
> School is kind of like that. There are some things and situations that can be viewed as nuisances, or worse. We can call those weeds. Yet they do exist. If we pull a weed, we often find another growing in its place in a short time. If we allow the weeds to coexist with the non-weeds, we can often enrich the ecology. The problem comes from defining and judging weeds. In any case, they must be attended to, or accepted. (Samples, Charles, & Barnhart, 1978, p. 139)

By way of contrast, seldom do we find programs that are specifically designed to prevent disruptive behavior. These programs are characterized by emphasis on positive classroom and school climates and teachers who model, encourage, and reinforce acceptable behaviors. This is not to say that many teachers do not teach, encourage, and reinforce acceptable behavior; however, their efforts do not seem to be part of a systematic and schoolwide or districtwide effort. In addition, preventive approaches do not seem to be emphasized in teacher training programs. The efforts at such approaches that do exist are spotty and seldom reflect a systematic ongoing plan or curriculum that is comparable to academic programs and curricula. These efforts are viewed as extras or something to include "if time permits," and yet the greatest concern among educators as well as parents continues to be unacceptable student behavior.

AFFECTIVE EMPHASIS

An effective preventive program is based on a strong affective emphasis that embodies three basic components or levels:

1. The classroom climate/messages we convey to children.
2. Merging feeling oriented and fact oriented learning through discussions.
3. Bringing feelings and emotions, needs and human behavior into the everyday curriculum. (Glass & Griffin, 1973)

The emphasis of this chapter is on levels 1 and 3. Level 1 can be described as a *group reinforcement plan.* Level 3 takes the form of relationship building activities. As a result of emphasizing levels 1 and 3, level 2 evolves as a natural process. The concept of affect used in this chapter includes all methods and strategies that relate to the human element as distinct from academic or other expectations. Carl Rogers described this attitude as expression of *unconditional positive regard,* or the inherent value of the human person.

THE KNOWLEDGE BASE AND THE PRACTICE DISCREPANCY

Wide recognition is given in education, psychology, social psychology, and philosophy to the need for programs, curricula, and instructional methods that recognize affect and stress acceptable social behavior. Current approaches, such as behavior modification, moral education, and humanistic education, all have developed strategies that can have a positive impact on behavior. It is interesting to note that these approaches tend to direct their strategies at the regular classroom and to clearly support the mainstreaming concept.

Recent research and position statements also emphasize the need for effective strategies and curricula in the affective domain. Phi Delta Kappa published a handbook (Fox, 1974) dealing with specific approaches to classroom climate. Rapid progress is being made in moral education, values clarification, and humanistic education (Hall, Kohlberg, Wilson, Kirschenbaum, DeLattre, Ryan, & Cogdell, 1978). The need to instruct children directly for the attainment of appropriate individual and group psychosocial skills is receiving rapidly expanding attention (Knaus, 1974; McCauley, Hlidek, & Feinberg, 1977; Meichenbaum, 1977; Rhodes, 1967). Johnson and Johnson (1975; see also Chapter 1 of this volume) outlined both theory and practice relating to the use of heterogeneous cooperative grouping procedures in classrooms and documented the positive influence on achievement, even in the traditional academic subjects, when "cooperation" is achieved. Teaching that stresses a humanistic approach to dealing with children, termed "congruent communication," has been detailed by Ginott (1972), and systematic techniques for teacher interactions with students based on humanistic philosophies have been outlined by Gordon (1974). Specific classroom reinforcement procedures were demonstrated by Greenwood, Hops, Delquadri, and Guild (1974) to result in the lessening of disruptive behaviors by pupils.

Research by Dr. Fredric Jones has documented repeatedly that teachers can reduce class disruptions by 65 to 90% and significantly improve student productivity through the use of social interaction skills in classrooms (Rardin, 1978). The positive effects of approval strategies on the self concepts of pupils was demonstrated by Borg, Langer, and Wilson (1975) in a continuing series of studies on various approaches to classroom management.

Despite the vast amount of research data and the variety of curricula made available through the sources just cited and others, teachers seldom use the research data and materials designed to teach acceptable behavior and create positive learning environments. The neglect can be measured in terms of classroom disturbances, lowered achievements, and much human suffering. Certainly, the reasons for not using preventive strategies are many and varied; teachers have related the following:

1. Extra planning and preparation are necessary upon initiating a plan.
2. Immediate results are not as evident as with punitive/adversive methods.
3. Teachers do not feel qualified or confident to engage in affective oriented activities.
4. Positive oriented techniques conflict with personal philosophies or teaching styles.
5. Teachers lack time because they are pressured to spend more time on basics.
6. There is a lack of a sound philosophy and understanding of the value of preventive measures.
7. Behavioral strategies are too complicated and require too much bookkeeping.
8. Disruptive behavior is the job of the principal, counselor, or social worker.
9. There is a failure to understand the negative group dynamics in classrooms that produce unacceptable behavior.
10. Acceptable behavior is expected; why should teachers reinforce children in special ways for what is the ordinary "expected" behavior?

An understanding of group phenomena is an essential starting place for teachers. A group of peers, whether first grade pupils or adult professionals, generally does not function or perform at optimal levels without specific planning to deal with the variety of anxieties that exist within the group. Some of these anxieties relate to a basic lack of self confidence, fear of failure, hesitancy to ask "dumb" questions, fear of inadequate achievement, and lack of trust among group members. These factors, along with an overriding competitiveness among peers, create a less than conducive environment for learning and acceptable behavior. Unawareness or ignorance of the inhibiting factors inherent in a group results in a variety of unproductive behaviors by teachers. Orientation to group phenomena ought to be one of the basic elements of teacher preparation.

A central feature of the two strategies that are outlined in later sections of this chapter is the teacher's modeling of positive behaviors or, more specifically, of interactions with students that can be characterized as more approving than disapproving. The predominance of disapproving interactions with students exhibited by teachers was discussed by Madsen and Madsen (1974). The authors surveyed 6,000 teachers regarding their attitudes on maintaining a positively oriented classroom, that is, a classroom that is characterized by the predominance of approval over disapproval; 99% strongly agreed with the notion that there should be more approval than disapproval. However, when these 6,000 teachers were observed in their own classrooms using their own criteria of approving behavior, only 8% were more approving than disapproving. White (1975), in a study of intermediate grade teachers, also showed that the rate of disapproval behaviors was higher than that of approval behaviors. These findings clearly illustrate the scope of the problem.

EMPHASIZING THE POSITIVE

Certainly, the great majority of teachers have good intentions to express more approval than disapproval, but few have developed vehicles to carry out these intentions. The need clearly exists for mechanisms that enable teachers to realize their good intentions, or what they think are sound educational practices. This mechanism must take the form of lesson plans or some other daily routine that will insure consistent use. The establishment of an ongoing plan is essential, especially on those days when everything seems to be going sour or when the teacher is not feeling up to par. It is a rare person indeed who is able to maintain a high level of approving behavior without the aid of an established routine. The adherence to a plan provides a very subtle benefit for the teacher and class simultaneously. On those days when things seem to be going negatively or the teacher is not feeling well, a few moments engaged in approval as a matter of routine can instantly improve the negative atmosphere, and the teacher will feel better.

An example outside the school situation illustrates the dilemma in which we find ourselves. At about age one, when infants normally begin walking, parents express great enthusiasm, encouragement, and reinforcement at any or all of the infant's efforts to take the first step. If the infant stumbles or falls, the parents respond with encouragement, caring, and other supportive behaviors that reward him as he develops the skills necessary to walk. However, if the parents were to respond negatively (e.g., "Dick, you're old enough to walk; your brother and sister walked at your age and all the neighbors' kids are walking. You have two strong legs, etc."), it would not be surprising to see many infants *not* walking at the age we normally expect.

To emphasize approval behavior and the reinforcement of acceptable behavior, an anonymous educator, several years ago, fantasized a discussion between Alice and the Mad Hatter, which Lewis Carroll might have written if he were alive today.

Alice:	Where I come from, people study what they are not good at in order to be able to do what they are good at.
Mad Hatter:	We only go around in circles in Wonderland; but we always end up where we started. Would you mind explaining yourself?

Alice: Well, grown-ups tell us to find out what we did wrong, and never do it again.

Mad Hatter: That's odd! It seems to me that in order to find out about something you have to study it. And when you study it, you should become better at it. Why should you want to become better at something and then never do it again? But please continue.

Alice: Nobody ever tells us to study the right things we do. We're only supposed to learn from the wrong things. But we are permitted to study the right things other people do. And sometimes we're even told to copy them.

Mad Hatter: That's cheating!

Alice: You're quite right, Mr. Hatter. I do live in a topsy-turvey world. It seems like I have to do something wrong first, in order to learn from that what not to do. And then, by not doing what I'm supposed to do, perhaps I'll be right. But I'd rather be right the first time, wouldn't you?

A suggestion and a word of caution may be appropriate at this point: When teachers become interested in attempting to increase their approval behavior, reinforce appropriate behavior, and encourage positive interaction among students, they frequently abandon their former methods of interacting and managing students. An abrupt change is usually frustrating and produces greater turmoil than previously existed. A smoother transition results if the teacher maintains the former pattern of interacting with the class and simply incorporates preventive strategies at a pace that is manageable for students and teacher alike. Usually, as preventive efforts are established as a part of the daily routine, the necessity to rely on less than positive approaches steadily decreases. Not only do students respond more favorably to positive approaches but, also they thrive on opportunities to feel that they have some control within the classroom. Moving slowly is wise.

Following is a discussion of two major approaches to the challenge of creating positive classroom environments. First, *group reinforcement plans* are considered and, second, attention is given to *relationship building activities.*

GROUP REINFORCEMENT PLANS

The group reinforcement strategy is based on the concept expressed in "Hail the Good" (Brunk, 1970):

> If you tell Charles you like the way he shared his book with Ted, he will be pleased that you noticed and will remember your compliment. The odds favor his repeating the behavior because it was followed by a positive consequence.

> If you comment constructively on Dave's improved spelling—he got six words correct this week and only five last week—you increase the chances of his working to sustain that improvement.
>
> If you notice out loud that Robert remembered to cross the T, that Jan's choice of colors shows good perception and that Sandy's science project is very ingenious, you are accenting the positive aspects of children's behavior. To the extent that your actions communicate genuine appreciation for achievement (however small), they will operate to enhance children's self-image, foster congenial classroom atmosphere, and increase the likelihood that desirable behavior will recur.
>
> It is a simple fact of life of psychology. We all look constantly for the little cues that tell us we are good, worthy, and likeable people. We are pleased and grateful when someone provides such cues. We remember them. We like to be around such nice people, and we are ready to return the kindness with interest.
>
> When we are criticized, scolded, or belittled, we feel hurt and resentful. We become defensive, and the impulse is to strike back. Whenever possible, we will avoid people who inflict such pain.
>
> We must cease the sterile efforts to detect undesirable behavior. We must ignore such behavior as much as possible and turn our whole attention to the detection of desirable behavior. Nor is it enough to merely recognize good behavior. We must go out of our way to find it. Charles Madsen has said it well. We must "catch the child being good."
>
> The idea takes a little getting used to. We are so much in the habit of finding what is wrong, or correcting mistakes, and of reacting to misbehavior that we find ignoring such matters all but impossible. For that is what we must do—ignore the bad and hail the good. And there is a bonus in all of this. For not only will we achieve happier students and better learning environments, we ourselves will change as well. Increasingly, at each day's end, we will find a satisfaction we had almost forgotten existed.

Perhaps the greatest value that should be emphasized in considering the implementation of this strategy is the flexible possibilities it offers. The specific form should be developed to fit the particular teaching style. The plan can be effective whether it is informal or expanded into an elaborate design.

An informal design may be as simple as the following outline:

1. Begin the day with approval comments about the class or individual students for 30 to 60 seconds.
2. Begin each learning activity with 30 to 60 seconds of approval behavior.

3. End each learning activity with approval comments.
4. Begin and end each transition with approval relating to desired expectations.
5. End the morning (prior to lunch) with approval.
6. In the afternoon, follow a similar pattern to the morning routine.
7. For secondary school students, simply translate to class period or module.
8. For elementary and secondary school students alike, the plan or outline must be part of a lesson plan to insure daily consistency.
9. The first seven points are a base. Modifications and adaptations to complement teacher style are a must.

The following outline presents a highly structured design for the same purposes as those in the informal design. In this more structured or formal approach, careful planning and preparation are necessary.

A structured group reinforcement program provides the class as a group with the opportunity to earn special privileges as a result of their efforts to attend regularly to established, agreed upon standards or guidelines. Individual as well as group efforts are acknowledged and the group is awarded points or tokens; these points or tokens can be accumulated and the total can be exchanged for a special privilege. All class members participate in the special privilege.

The teacher consistently expresses approval of acceptable behavior that, he or she hopes, will result in the continuation of acceptable behavior. In addition, students are provided with a structured incentive system that is designed to engage them in positive behavior and that establishes a norm of acceptability for individual and class behavior.

As an aid to expanding approval vocabulary and as a reminder, the following list could be placed in a prominent location for use by both the teacher and other participants.

Approval Responses

Yes
Good
Great
Neat
Nice
O.K.
Fascinating
Charming
Commendable
Delightful
Brilliant
Fine
Uh-huh

I'm glad you're here.
That's a prize of a job.
You make us happy.
That shows thought.
We think a lot of you.
You're tops on our list.
Remarkably well done.
You're very pleasant.
That shows a great deal of work.
Yes, I think you should continue.
A good way of putting it.
I like the way_____explained it.
That is a feather in your cap.

Positively
Go ahead
Yeah, all right
Nifty
Exactly
Of course
Cool
Likeable
Wonderful
Outstanding work
Correct
Excellent
That's right
Perfect
Satisfactory
How true
Absolutely right
Keep going
Good responses
How beautiful
Wonderful job
Fantastic
Terrific, swell
Beautiful work
Tasty
Marvelous
Exciting
Pleasant
Delicious
Fabulous
Splendid
Well-mannered
That's clever
I'm pleased
Thank you
Outstanding

You are very friendly.
That's an excellent goal.
Nice speaking voice.
That's a nice expression.
It is a pleasure having you as a student.
That's interesting.
You make being a teacher very worthwhile.
That's sweet of you.
Well thought out.
Show us how.
You're doing better.
You are improving.
You're doing fine.
You perform very well, ____.
That's very good, ____.
I'm so proud of you!
I like that.
This is the best yet.
That's the correct way.
That's very choice.
You do so well.
You're polite.
Thinking!
That is very imaginative.
That will be of great benefit to the class.
I appreciate your attention.
That was very kind of you.
You catch on very quickly.
That was a good choice.
My, you have a nice attitude.
You're really trying.
Your work is very neat.
That was nice of you to loan her your ____.
You should be very proud of this.
Very creative.
Congratulations.

Policies and Procedures

Following is a recapitulation of the general principles of the group reinforcement program to use in awarding points or tokens.

The Basic Purpose of the Program Is to Increase Desired Behavior.

The reinforcement of behavior in this context is intended to help children to practice and learn how to be helpful to each other and the teacher. Basically, teachers reinforce those behaviors that they want to see and ignore those behaviors that they do not want to see. In this way, one moves toward a positive group attitude that is essential to a healthy, cooperative class.

Positive Interpersonal Interactions Are the Most Important Area of the Group Program.

Reinforcing children for helping, approving, encouraging, praising, sharing, reminding, and complimenting each other, and comparable behaviors is critical to the success of this program. The focus on "following group directions" is significant, but primarily it is a means of social management of the group, especially at transition times. Of greater importance is the "positive interpersonal interactions" area. It is likely that children who can work together and imitate or model positive teacher and peer behavior will form and maintain a group that is more responsible and self directed in classroom learning and behavior.

The Teacher Is the Reinforcer, Negotiator, and Moderator in the Classroom.

This group program puts the teacher in the role of rewarding reinforcers, observing and publicly noting desired behaviors, facilitating discussion of appropraite behavior, negotiating bonuses, moderating classroom interaction and activity, and arbitrating disputes that arise. He or she is responsible for the positive verbal management of the overall program. The teacher is still the teacher; he or she does not stop teaching, abandon the children, or turn the class entirely over to student direction and control. The teacher "catches the kids being good," emphasizes the appropriateness of helping one another, which is a positive behavior, emphasizes that "we're positive, not perfect" (people can have a tough day), and generally helps students to assume more responsibility for helping and approving one another.

Each Child Counts as One Point.

When a child exhibits a behavior that is reinforced, that child has earned a point for the group. The area of "following group directions" uses a sight count procedure in which those children who have followed directions are counted. The area of of "interpersonal interactions" employs intermittent reinforcement or partial counting procedures in which the teacher awards a point to the group as he or she notes the occurrence of a positive interpersonal interaction among class members.

Each Point Earned Is Contributed to the Entire Group.

When a child earns a point, it belongs to everyone, not just to the child. This is a total group program.

All Points Are Awarded for Positive Behavior.

Behaviors by any member of the group that are in an area being reinforced are those behaviors that are desired, are positive in nature, help the class to function more appropriately, and are intended to be increased. This program does not focus on negative behavior.

Points Are Added and Never Taken Away.

When children earn points for the group, these points are permanently earned. Do not take points away from the group as a response cost (or punishment) to an individual or the group. If individual children do not meet the expectations set for their behavior, do not award points to the group on their behalf. Try to award points only on behalf of those individuals who behave as expected.

Bonus Points.

Bonus points are a central feature designed to motivate greater cooperation. The class should be clearly aware that whenever everyone is ready or complying, a bonus doubling of points can be earned. For example, if there are 28 pupils in the class, and if all assignments are turned in, 56 points could be awarded. The class also could be aware that coercion or threats are not acceptable behavior. However, positive encouragement, helping a classmate to complete a task, or the positive reminding of a friend to be ready can earn additional points.

Getting Started

Include students in all aspects of the planning. Establishing student ownership and support at the beginning is the key to the success of the strategy. An outline of elements to be considered with students in preplanning follows:

1. *What criteria for behaviors will be established as the basis for the class to earn special privileges?* For example, (a) following group directions; (b) completing assigned tasks; (c) completing independent work; (d) positive interpersonal interactions; (e) appropriate conduct in out of class settings (physical education, lunch, assemblies); (f) smooth transitions; and (g) helping substitute teachers. In most cases students will suggest appropriate criteria.
2. *Ways to reinforce.*Teachers can do it verbally; for example, by counting, "Twenty-two people are ready to begin, and helped the class earn a reward" or "I noticed 10 people worked the last 30 minutes."
3. *Ways to record and maintain an on going point total.* Number line, beans in a jar, slash marks, or checks on the chalkboard. Summarize total earned daily; emphasize daily progress toward goal; use a

visual display, including desired goal; count total points earned to date.

4. *When to recognize appropriate behavior.* When it occurs (especially for individual behaviors): teacher convenience, end of class period, end of teaching session, or end of day, or whenever appropriate.
5. *Ways in which points may be used.* Student input is essential, assuming class goal is acceptable; for example, free time, extra P.E. time, playing records, movie, treats, popcorn party, TV program, field trip, playing cards, or game.
6. *What point total is necessary to earn privilege or goal?* Estimate reasonable potential; set total that can be reached first week. Subsequent goals can be extended two or more weeks. Trial and error or experience may be only guide.

RELATIONSHIP BUILDING ACTIVITIES

The relationship building component is designed to provide students with practice in the use of positive verbal interpersonal interactions. Relating in a positive way requires practice and guidance. Teachers often expound on the virtues of politeness, friendliness, being kind to each other, sharing, consideration, and the like to their classes. Usually, however, little if any time is devoted to providing opportunities to practice or role play these values. Without this opportunity for structured, positive interaction, little development occurs and students continue to respond to each other in negative, put-down ways. On the other hand, as a result of experiencing positive interaction and providing regular opportunities to develop positive habit patterns, students' behavior can be changed and, as a result, the students will tend to feel better about each other.

The following lessons offer one approach. The lessons are conducted, one at a time, three times a week, for approximately 30 to 45 minutes per session. A suggested sequence and brief description of sample activities follow:

1. *Filmstrip:* "Warm Fuzzies." The filmstrip introduces the concept of "fuzzies" (any positive behavior that produces good feelings) with a following discussion.
2. *Fuzzy Names:* Positive descriptive names are chosen by and for each class member, students, and teacher (e.g., Resourceful Richard).
3. *Group Portrait:* Children suggest physical features of individuals to be drawn on a portrait of the group (e.g., Sally' eyes).
4. *Greetings as a Fuzzy:* Group members practice listening, repeating, and responding to one another by practicing, for example, "Good morning" and other simple greetings.

5. *Student-Teacher Survey:* Students share events and activities they like and enjoy with one another and the total group.
6. *Filmstrip:* "IALAC." The "I am Lovable and Capable" filmstrip is shown and used as a basis for group discussion.
7. *"I" Poster:* Group makes a poster of "I" using puzzle format. As fuzzies occur during the day at home, school, or elsewhere a section of the "I" is colored in and completed.
8. *Sharing Good Feelings:* Group members disclose activities and behaviors that help them to feel good, and elaborate on how and why.
9. *It Takes Two to Cooperate:* Dyads of students select a picture from a catalogue acceptable to both to be placed under selected categories of food, activities, or events.
10. *Let's Learn More About One Another:* Dyads interview each other, using a structured format, to learn three new things about one another.
11. *Repeat Filmstrip "Warm Fuzzies":* Filmstrip is repeated with children asked to note aspects they did not see last time and to decide whether the story is now more or less interesting.
12. *More Ways to Give and Receive Fuzzies:* Brainstorming of new ways to give and get fuzzies; discussion of the most practical ways to be tried; and suggestions for how to earn more points in the group reinforcement program.
13. *The Magic Box:* A box containing gifts is passed around the circle, and each individual gives another child a gift from the box, explaining what it is and why they want him or her to have it.
14. *What Do You Know About Me?* Dyads complete written questionnaires, then they share answers about what is known and unknown about each other.
15. *Brainstorming Attributes:* Total class brainstorms four positive attributes for each individual.
16. *Identification of Personal Attributes Using Attributes List from Previous Lesson:* Each individual lists at least three more positive characteristics about himself or herself.
17. *Attributes Sharing:* Individuals share or disclose their lists of positive characteristics with the total group.
18. *Repeat "IALAC" Filmstrip.* The "IALAC" filmstrip is repeated and the ensuing discussion focuses on aspects not noted previously, for example, how one can help another to "climb over his or her brick wall."
19. *First Aid to Damaged IALAC:* The class role plays ways to break down an individual's wall and practices ways of helping others to feel better about themselves.
20. *Fuzzy Shower:* Total class brainstorms positive characteristics of each classmate while he or she sits in center of circle.

The activities are conducted in a variety of ways and repeated, depending on the group. At the conclusion of this phase, teachers are encouraged to continue with various discussion sessions, including values clarification and decision making sessions as problems arise throughout the year.

INSERVICE TEACHER EDUCATION

In the St. Paul Public Schools several methods of inducing teachers to use group reinforcement and relationship building activities have been developed. Traditional after school teacher inservice training programs, in which information and ideas are discussed, have produced less than desirable results. Teachers typically agree with the methods and techniques presented but seldom follow through on them; and, frequently, inservice classes for teachers become academic exercises that produce only negligible change in the teachers.

Follow up, teaming, and modeling are requisite components of an effective inservice teacher education model; they support and aid in the process of internalizing the content and they improve the likelihood of teacher change. Follow up, teaming, and modeling have become integral parts of the group reinforcement and relationship building concepts as taught in St. Paul. Various combinations of the three components have been used. The teaming and modeling efforts have been especially effective when they are used as part of teacher preparation for mainstreaming. Teachers have been very willing to schedule time for the demonstrations of relationship building activities and organizing group reinforcement plans within their classrooms. Following is an outline of procedures that have been used successfully in inservice teacher education:

1. The class is announced, in most cases, via a 15 minute presentation during a faculty meeting (aides are also encouraged to attend). The class is outlined as a task oriented course; teachers understand that they will be asked and expected to attempt several new strategies with their classes.
2. The first class session consists of outlining the group reinforcement plan; discussion centers on the mechanics of the plan as well as on philosophical issues relating to behavior management (e.g., tangible rewards). Teachers are asked to form small groups, with the task of outlining a specific plan. Individuals are asked to share their ideas, and suggestions from the instructors and participants are encouraged. Teachers are expected to carry out the plans with their classes.
3. The subsequent sessions (about five) are devoted to asking teachers to discuss their plans and both the positive and negative outcomes. Again, suggestions are provided by the instructor and participants. The relationship activities are introduced and role played during each of the sessions. The class simply experiences the activities as would their students; several activities are introduced during the re-

maining five sessions. At subsequent sessions, teachers are asked to share their experiences with the relationship activities.

4. Teachers have the option of teaming with the inservice instructor for work in the teacher's classroom; the instructor normally schedules two sessions weekly; half-hour sessions are scheduled for 3 to 4 weeks. This support has been extremely valuable to teachers who lack the confidence to engage their classes in an affective interpersonal curriculum.
5. As teachers begin to establish their group reinforcement plans and carry out the relationship activities, each is asked to schedule an appointment with the inservice instructor to report on the specifics of his or her group reinforcement and relationship building activities.
6. Four weeks after the class ends the participants are asked to meet for a brief sharing of their experiences in using the strategies.

What are the results? Comments provided by a group of teachers recently involved in training and attempts for implementation in their classrooms were as follows:

On the average, students became more responsible for themselves.
Students became more aware of classroom rules.
There was a sense of pulling together for a common cause.
Class members started to do their own housekeeping by reminding each other about behavior.
Behaviors and attitudes improved.
I feel better about the class and myself.
It puts the burden on students instead of me (always) as the "bad guy."
Students are more attentive and willing to listen to direction.
They really get on the student who goofs.
They seem quite pleased when I tell them they have earned a point.
A better feeling of cooperation and concern for one another has been evidenced.
Students who receive positive comments try to get more of them.
I feel more relaxed with my classes.
Students treat each other with more kindness and respect.
I am looking forward to having a good year.
When we reach our goal we will reward ourselves.
Children respond better when a teacher from another class speaks to them.
Children seem more enthusiastic about school.
Correct behavior is looked upon more favorably since it will benefit the group (re-establishing norm).
The children are more aware of what constitutes good behavior, because they practice it.
Problem children seem to be acting out less often; they can get recognition for positive behavior.
It's a good way to build self esteem, especially in handicapped youngsters.

SUMMARY

As one attempts to understand the specific mechanics of affective oriented, preventive oriented strategies, there is a danger of losing sight of the basic concept or intent. Both strategies tend to increase the students' total motivation for school and learning. The group reinforcement plan enables the teacher to maintain a high level of approval interactions with students. The relationship building activities support the group plan in providing students and teacher with regular opportunities to practice positive interactions.

The cumulative effect and impact on the classroom climate can be great and offers advantages for all students. However, it is essential that attention be given to making classroom climates "positive" if children who have special needs are to be accommodated in regular classes in increasing numbers.

REFERENCES

Bandura, A. *Social learning theory*. Englewood Cliffs NJ: Prentice-Hall, 1977.

Borg, W.R., Langer, P., & Wilson, J. Teacher classroom management skills and pupils behavior. *Journal of Experimental Education*, 1975, *44*, 52-58.

Brunk, J. W. *Weekly reader* (Teachers' Ed.), issue 10, 1971. (College of Education, Ohio University)

Fox, R. S. *School climate improvement: A challenge to the school administration*. Bloomington IN: Phi Delta Kappa, 1974.

Fuzzies. (Adapted from a book popularized by R. Lessor.) Niles IL: Argus Communication, 1974. (Film)

Ginott, H. *Teacher & child*. New York: Macmillan, 1972.

Glass, R. M., & Griffin, J. B. *Affective education*. Bloomington IN: Center for Innovation in Teaching the Handicapped, Indiana University, 1973.

Gordon, T. *Teacher effectiveness training*. New York: Wyden, 1974.

Greenwood, C. R., Hops, H., Delquadri, J., & Guild, J. Group contingencies for group consequences in classroom management: A further analysis. *Journal of Applied Behavior Analysis*, 1974, *7*, 413-425.

Hall, R., Kohlberg, L., Wilson, J., Kirschenbaum, H., DeLattre, E. J., Ryan, K., & Cogdell, G. Moral education and secular humanism. *The Humanist*, November-December, 1978.

The IALAC Story. (Adapted from a story popularized by S. B. Simen.) Niles IL: Argus Communication, 1974. (Film)

Johnson, D. W., & Johnson, R. T. *Learning together and alone*. Englewood Cliffs NJ: Prentice-Hall, 1975.

Knaus, W. J. *Rational emotive education. A manual for elementary teachers*. New York: Institute for Rational Living, 1974.

Madsen, C. H., & Madsen, C. K. *Teaching discipline*. Boston: Allyn & Bacon, 1974.

McCauley, R. W., Hlidek, R., & Feinberg, F. Impacting social interactions in classrooms. In F. Wood (Ed.), *Proceedings of a conference on preparing to foster personal growth in emotionally distrubed students*. Minneapolis: Advanced Institute for Trainers of Teachers for Seriously Emotionally Distrubed Children, University of Minnesota, 1977.

Meichenbaum, D. M. *Cognitive behavior modification.* New York: Plenum, 1977.

Rhodes, W. C. The disturbing child: A problem of ecological management. *Exceptional Children,* 1967, 33 (7) 449-455.

Rhodes, W. C. & Tracy, M. L. *A study of child variance.* Ann Arbor: Institute for the Study of Mental Retardation and Related Disabilities, University of Michigan, 1972. (Distributed by the University of Michigan Press)

Samples, B., Charles, C., & Barnhart, D. *The wholeschool book.* Reading MA: Addison-Wesley, 1977.

White, M. A. Natural rates of teacher approval and disapproval in the classroom. *Journal of Applied Behavior Analysis,* 1975, 8, 367-372.

Observing Skills for Teachers

FRANK H. WOOD

Special educators who are responsible for direct service to students with educational disabilities have found systematic methods of observing and recording relevant student behavior to be a valuable tool for aiding their students' learning. Application of these methods requires additional teacher time, which suggests that those teachers who use them must be repaid by an increased sense of professional competence and personal satisfaction. The teacher willing to commit this additional time, which is greater during the initial learning period, will find that observation methods are easily mastered and the rewards are real.

The purpose of this chapter is to introduce several methods of systematic observation and to comment on their relative advantages and disadvantages in order to assist beginning observers to make a thoughtful choice of the procedure that best meets their needs. Examples are provided. Fuller discussions of the various theoretical perspectives on observation are available in Weinberg and Wood (1976). Boehm and Weinberg (1977) have written a brief, nontechnical manual that expands on several of the topics mentioned here; they also discuss such issues as reliability and validity which relate to observation as measurement. For a discussion of applications of observation to research, see Hersen and Barlow's (1976) excellent book.

WHAT IS GOOD OBSERVATION?

How does observation differ from looking? All of us spend much of our waking hours looking at things in the world around us; we are all, in some sense, observers. The difference between "lookers" and "observers" is system. Good observers have trained themselves to watch carefully for easily overlooked patterns of activity. Not only is the skillful observer's ability to point out important relations to the casual looker the basis of our science, but it also provides the basis of what is labeled *fiction*, and it accounts for the lasting fascination of the detective story genre. Good scientists, good detectives, and good teachers, first of all, are careful, systematic observers.

CRITICAL INCIDENT TECHNIQUE

Most educators have recorded observations of "critical incidents" in their classroom. A discussion of this procedure introduces several important principles of good observation technique. Using the critical incident procedure, teachers describe in narrative form incidents of a student's behavior that are considered especially noteworthy. Most such records are of disapproved behavior; the narrative illustrates the student's particular problem. In the following, the behavior of a student referred by his teacher as distractible and hyperactive is described:

> During today's math seatwork time at 10:30 a.m., Bill was restless and distractible as usual. He kept turning around in his seat and bothering his neighbors. I had to speak to him several times, but he always started up again in a few minutes. Eventually, he began talking to some other children. When Mary refused to pay attention to him, he poked her with his pencil. By now his behavior had become so out of control I had to ask him to leave the room and sit on the bench outside Mr. Brown's office. This same sort of thing goes on every day. He just won't sit still or pay attention!

As the teacher's indictment of a student whose behavior is a problem for her and some of his classmates, this statement is useful. As a systematic description of his behavior, it is poor. As an assessment providing a basis for intervention planning, it is of little use.

The account begins well with the record of the time of day and the activity. However, like most critical incidents this one was written at a later time, so the time of day is only approximate. The events described are not related to specific times of the period.

PRINCIPLE 1: Observation data should be recorded when they are observed.

PRINCIPLE 2: Observation data should be continuously related to the time the observed events occur.

If an unbiased description of a student's behavior is to be obtained, teachers must plan in advance when they will observe him or her and must record continuous observations during that period, linking them to the passage of time. If a teacher notes down only the times when the student's problem behavior is at its peak, the record will be highly biased in favor of the overall judgment of him or her.

The preceding sample record fails to separate inference from observed behavior—a very common problem. Inferences are often value laden. For example, Bill is described as "restless and distractible as usual" and "out of control." Despite the strong tendency to agree immediately with such descriptions, they should be looked at in greater detail. On what behavior are these statements based? Instead of a description of how Bill behaves we have the teacher's evaluations of that behavior. Furthermore, there is no basis for comparing Bill's behavior with that of his peers. Are they also "restless and distractible"? How much more "restless and distractible" is Bill than they are?

PRINCIPLE 3: **An observation record should be based on observable behavior. Inferences about thoughts and feelings, which are not directly observable, and evaluative comments should be linked to a description of the behavior on which they are based.**

PRINCIPLE 4: **Quantitative statements about whether an individual student behaves in a particular pattern more or less than peers should be referenced to observations of peer behavior made at the same time and place.**

Would another observer have agreed with Bill's teacher that he is restless and distractible? The question is hard to answer. What does the teacher mean by "restless and distractible"? Would it not help if the terms were defined beforehand?

PRINCIPLE 5: **Descriptions of behavior should be phrased in terms that are well defined. These definitions should be communicated along with the description of the behavior.**

PRINCIPLE 6: **Whenever possible, more than one observer should describe the same behavior. If this is not feasible, observers should practice together or test themselves against an expert standard to avoid the inadvertent intrusion of idiosyncratic bias into their observation records.**

Principles 4, 5, and 6 are not easily accomplished when the critical incident technique is used. But this procedure for recording observations can be a more useful source of information than the example if Principles 1, 2, and 3 are applied. The following shows how the sample incident might read if the recording were made as the incident unfolded, the time intervals were noted more frequently, and evaluative terminology was avoided.

10:30: Class doing math seatwork.
10:33: Noted Bill looking up from work, drumming with pencil on desk.
10:35: Bill turns 90° from front and leans toward Mary's desk. He turns back and looks down at work when I look at him and frown.
10:38: (Had been busy helping George at front of room for several minutes.) Bill has turned toward Mary again and is saying something I cannot hear to her while he looks at her paper. Mary tries to turn her back on him and moves her paper over to the other side of her desk. Bill pokes her back with his pencil. Mary slaps back at Bill who yells out that she is a "b____" and he doesn't want to see her paper anyhow. He is standing up now, and as I move toward him, he backs down the aisle, kicking at desks and chairs as he goes. I point toward the door and he opens it and backs away down the hall toward Mr. Brown's office. I tell him to sit on the bench and go in to explain to Mr. Brown why he is there. When I come out again Bill is sitting on the bench but will not look at me or speak to me. I tell him he is to stay there until I come to get him. Bill turns away and says something I cannot hear.
10:43: Back in class. There is some noise and talking going on as I come into the room but the students turn back to their work when I come in.

This time, the teacher has given an account of direct observations of Bill's behavior rather than a statement primarily describing reactions to that behavior. It is possible for teachers to write such a record if they train themselves to observe, make brief notes at the time, and write out a complete description of the incident as soon as possible after it occurs. However, the fundamental problem of bias is difficult to eliminate. The teacher/observer has selected an incident that shows Bill "at his worst." Other procedures can be used that take little if any more of the teacher's effort and come closer to satisfying all six principles of good observation practice.

BEHAVIOR, TIME INTERVAL, AND FREQUENCY

The key variables to consider in planning an observation system are the behavior patterns to be observed, the time interval in which they are to be observed, and the frequency of their occurrence. When observing some behavior patterns, it may also be important to observe their duration, that is to say, how long a given occurrence lasts, but the specification of which, when, and how often will cover most cases with which teachers are concerned.

It is best to begin with a very simple system. Since writing out a narrative description of behavior takes time, it should be decided in advance that all social behavior observed will be classified as either "acting out" or "withdrawing." Most problem behaviors seem to cluster under one of these two labels. They are rather general terms but they can be defined by giving specific examples. For example, *acting out* includes such behavior as hitting people or objects, yelling, making loud noises, and the like, whereas *withdrawing* includes turning away from others, not speaking when spoken to, and the like. If a teacher decides to check a child only once a day for either kind of behavior, the time interval is one day. Thus, the observation record might consist of a sheet divided into two columns, one headed *acting out behavior* and the other, *withdrawing behavior*, in which a tally mark is entered for each day the behavior is observed. The total of the tallies would be the frequency of occurrence of the behavior. Going back to the critical incident example again, it looks as if a tally mark would be placed in each column to record observations of Bill's behavior on that particular day.

Now, this system is very simple and limited, but demonstrates all six principles and has some potential advantages over the critical incident method. The behavior of selected peers can be observed and recorded to provide a context for considering the relative uniqueness of Bill's behavior. Observations can be checked against those of other observers, thereby obtaining an estimate of inter-rater reliability.

As the system is refined some advantages are retained by breaking down general behaviors into more specific behaviors and intervals into shorter time units. Since number of behaviors multiplied by number of intervals equals total possible frequency of recording, the possible frequency totals rapidly increase. Suppose the occurrence or nonoccurrence of three behaviors is recorded each morning and each afternoon, or twice a day. The total number of tallies possible increases from two to six, a small increase to be sure, but a fact to keep in mind since each tally possibility presents a yes/no decision. How many such yes/no decisions on the occurrence of a particular behavior can a teacher manage each day? 12? 100? 500? At what point is the increasing number of tallies no longer a useful refinement of the observation record but only additional number?

There is no definitive answer to the question. Each new problem to be solved requires a reconsideration of the trade off between number of kinds of behavior to be recorded and length of the observation interval. As a practical matter, useful observation records range from 1 to 200 possible tallies per day for a given individual. In the next sections, the general case will be discussed further and several specific observation systems that may serve as examples will be reviewed.

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VARYING THE NUMBER OF BEHAVIOR PATTERNS AND INTERVALS

Many lists of behavior patterns are intended to be exhaustive, that is, to permit the description of all of an individual's behavior. For example, consider two of the better known behavior checklists: Quay and Peterson (1967) and Walker (1968). If they are used as intended, at time intervals of from several months to a year or more, the task of recording observations of an individual on a behavior checklist is not too difficult. But, if they are used on a daily or even weekly schedule, the checklist include too many descriptors of behavior to make them attractive for teacher use. How can the observer's task be made simpler?

First, the number of behavioral descriptors can be reduced. Good candidates for elimination are easy to find. First, eliminate those descriptors that are based on inferences from unspecified observable behavior, for example, "moody," "unhappy," "depressed," "hostile," "hyperactive." Other groups of descriptors which can be dropped are those that are not relevant to the problem behavior of the particular student concerned. The task is made simpler by accepting a less complete description. In this case, the decision about which to drop and which to retain must be reconsidered with each new problem. The general rule is to give up the idea of an exhaustive list of descriptors and to include only those of greatest usefulness.

There are other ways to simplify the task. It has been noted that the actual frequency of teacher disapproved behavior is always much lower than the incidence of approved behavior. In as much as the necessity of making a tally mark adds appreciably to the time required to make a yes/no decision, some observers record only the frequency of disapproved behavior. Thus, since more time is spent working—"on task"—than not working—"off task"—tallies are made for instances of off task behavior; since more time is spent "not hitting" than "hitting," a record is made of instances of hitting. The problem with such a system is that it focuses the teacher's attention on the student as a producer of disapproved behavior and may eclipse awareness of his or her more typical "good" behavior.

By eliminating behavior descriptors according to one or more of these rationales, experienced observers have developed useful general systems that require the recording of the frequency of only a small number of behaviors. Forced by circumstances to choose only one behavior to be observed, and defining it negatively to minimize the number of tallies to be recorded, a teacher could select being "off task" as the critical school social behavior, that is, not attending to one's work. *Off task* is defined as not looking at the assigned task. Deno and Mirkin (1977) suggested four critical social behaviors to observe: "off task," "noise," "out of place," and "physical contact."

Besides varying the number of behaviors observed to change the difficulty of the observer's task, the length of time intervals for recording can be adjusted to fit the observer's available time. As already noted, behavior checklists are commonly used to summarize observations made over long intervals; but they can also be used to cover intervals of any length. In practice, however, as the intervals become as short as only a few seconds, a point is reached at which only one behavior pattern can occur within an interval. By using intervals of 2 to 3 seconds, then, an almost complete continuous record of the frequency or rate of occurrence of an observed behavior can be obtained. But only skilled observers can maintain such a record on more than a few behavior patterns. Usually, teachers compromise by giving up the possibility of such a complete record in order to reduce cumber and make the task easier, and they accept the resulting loss of some information. How critical this loss may be can only be answered in regard to a specific problem.

Intervals of any length can be used. If data collection will continue for weeks or months, entering one tally for an entire daily class period is an adequate record for some behavior. As a general rule, intervals of from 20 seconds to 1 minute permit observers to record accurately the occurrence of several key behaviors and meet most needs adequately.

Before turning to a more detailed study of some examples of procedures developed for observing and recording behavior, the main ideas in this section will be reviewed. Figure 1 shows how to vary the difficulty of the observer's task and the ease of recording along the dimensions of inclusiveness and detail of description.

Following is a review of some procedures that vary along these dimensions, beginning with those less difficult for the teacher/observer to use and proceding to some of greater difficulty which have features that may recommend them for special uses.

	Complete description		Partial description	
More Difficult for Observer	Short time interval	⟺	Long time interval	Less Difficult for Observer
	Many behavior categories		Few behavior categories	
	Frequent occurrences		Rare occurrences	

FIGURE 1: Dimensions of Inclusiveness and Detail of Description in the Observation and Recording of Behaviors.

THE BEHAVIORAL OBJECTIVES SEQUENCES

As mentioned previously, a behavior checklist may be regarded as an extensive list of behavior patterns that is completed by an observer as a summary record at the end of a relatively long period of observation. Such a checklist can be completed more frequently, daily or hourly, but it is extensive and includes many patterns that are not important in an individual case, thus making it impractical. Other than paring the list down to a handful of behavior patterns to fit each individual, is there some way to make it more manageable? The following strategy has been used successfully.

1. Develop a list of social and academic behavior patterns.
2. Arrange the items in an order based on a typical sequence of human development or a logical task hierarchy; in either case the list will move from basic or simple behavior patterns to more complex patterns that incorporate additional elements.
3. Start at the beginning of the list and check off the behavior patterns you observe performed by the student you are rating. Eventually, you will reach a point on the list where the listed behaviors are not being demonstrated by the student.
4. Choose the first five or six missing behavior patterns as objectives for instruction and maintain a daily summary record of their performance by the student, only periodically checking his or her skills against the entire list.

This procedure has the work reducing advantages of a relatively long time interval (school day or class period) and relatively few behavior categories to be attended to at any one time while it retains the potential of an exhaustive description of desirable behavior shown by the student observed.

Such a procedure was developed by Braaten (1979), for use with severely disturbed adolescents in a school setting. Braaten's list includes behavior patterns that are grouped into five general categories: behavior, communication, socialization, academics, and counseling (see Figure 2). Teachers and their assistants move down each list during the initial assessment, checking those behavior patterns they have observed performed appropriately by the student 90% of the time. Instruction is then directed toward student mastery of a target group of six behavior patterns in each category. Each afternoon, after the students have gone home, the teacher/assistant team discusses their behavior and makes a daily record of whether a specific behavioral objective was shown "always," "sometimes," or "never" by a given student. When mastery is shown for a sufficient period of time, the mastered behavior is checked off his or her list and attention turns to the next missing behavior pattern. Thus, teachers observe and record the occurrence/nonoccurrence of approximately 30 behavior patterns for each student during each one day interval. Braaten and his staff

FIGURE 2: Illustrative Low, Middle, and High Level Objectives from the Behavioral Objectives Sequence (Braaten, 1977).

Behavior Area (45 Objectives):

Low (3): To appear alert and able to focus on activities (not exessively tired, under the influence of drugs, or excessively hyper)

Middle (32): To maintain self control and comply with established procedures in group situations (given classroom structure and verbal support by teacher: demonstrates ability to routinely work in a group). (Compare to DTORF behavior goal B-19.)

High (43): To accept and use support from mainstream resources (demonstrate ability to function successfully independent of support from the outreach staff).

Communication Area (42 Objectives):

Low (3): To respond appropriately to greetings and farewells from adults and peers without obscenities, put-downs, ignoring, etc.

Middle (28): To spontaneously participate in group discussions.

High (41): To verbalize desire and plans for returning to the mainstream.

Socialization Area (46 Objectives):

Low (3): To engage in organized solitary entertainment such as putting together puzzle, listen to music, etc., with direction from teacher if necessary. (Compare to DTORF socialization goal S-3).

Middle (34): To respond appropriately to positive peer pressure.

High (46): To *spontaneously respond appropriately* to negative peer pressure.

Academics Area (48 Objectives):

Low (1): To attempt academic tasks assigned, with help if needed.

Middle (35): To work *independently* on tasks for periods of 30 to 40 minutes.

High (46): To complete *all* assigned tasks.

(continued on next page)

Figure 2 (continued)

Counseling Area (49 Objectives):

Low (1): To attend scheduled sessions.

Middle (35): To demonstrate ability to handle not getting his or her own way by verbally acknowledging the fact and conforming to the decision.

High (44): To *initiate* goal setting for self.

found that this procedure provides an important data base for their program, both guiding instruction and permitting evaluation of program effectiveness.

Braaten's procedure was developed during his adaptation of an early version of the Developmental Therapy Objectives Rating Form (Wood and colleagues, 1975) to the characteristics of a specific group of students and his program plan. Similar general lists have been developed by Hewett and Taylor (in press) and Stephens (1975). Such lists are often used with intervals longer than a single day; however, Braaten's procedure seems best suited to providing the kind of observation data that are needed by teachers of students with special needs.

FOUR CATEGORIES OF TEACHER CONCERN

Deno and Mirkin (1977) illustrated another approach to developing a procedure that provides useful information to the teacher without requiring excessive time. Based on their experiences as consultants to teachers working with special students, they selected a group of only four social behavior patterns that "fairly represent the 'categories of concern' for most classroom teachers" (p. 101). As already mentioned, Deno and Mirkin defined the four negative patterns to make the recording of frequency of occurrence less difficult: "noise," "out of place," "physical contact," and "off task." They suggested that the target student be observed initially 10 to 30 minutes each day for 5 to 7 days and, thereafter, as frequently as possible. The four categories are defined as follows:

1. *Noise:* Any sounds created by the child which distract either another student or the teacher from the business at hand. The noise may be generated vocally (including "talk outs" or unintelligible sounds) or nonvocally ("tapping a pencil" or "snapping fingers").
2. *Out of place:* Any movement beyond the either explicitly or implicitly defined boundaries in which the child is allowed

> movement. If the child is seated at his desk, then movement of any sort out of the seat is "out of place."
>
> 3. *Physical contact or destruction:* Any contact with another person or another person's property which is unacceptable to that person. Kicking, hitting, pushing, tearing, breaking, taking, are categorized as physical contact or destruction.
> 4. *Off task:* Any movement off a prescribed activity *which does not fall into one of the three previously defined categories.* "Looking around," "staring into space," "doodling," or any observable movement off the task at hand is included. (Deno & Mirkin, 1977, pp. 101-102)

Some teachers may find they can make such a record while teaching or carrying out other academic tasks. Most will find they will need the assistance of an aide, the principal, or a school psychologist. Deno and Mirkin suggested that this procedure be used to help spot critical areas of problem social behavior. More specific pinpointing of behavior patterns for change would then follow.

Deno and Mirkin suggested recording behavior continuously, that is, noting each occurrence of one form of the behaviors. Anyone wishing to make this system less difficult to use could specify observation intervals of 1 minute or 30 seconds. The record would then consist of the number of *intervals* in which the behavior pattern was observed to occur, a number that usually will be less than the actual frequency of occurrences. For example,

Minutes	Ist	2nd	3rd	4th	5th	Total
Continuous record	//	/	///	- - -	/	7
Interval record	/	/	/	- - -	/	4

The observer's task is easier when a longer interval is used, but details are lost.

THE PUPIL OBSERVATION SCHEDULE

Previously, in this chapter, the desirability of limiting the actual observation record to observable behavior while leaving inferential and valuing statements to a discussion section of the record or adding them as commentary was stressed. The thoughtful reader will have noted that evaluative terms tend to creep into checklists and behavior pattern descriptions such as those mentioned. "Noise," in the Deno/Mirkin category system, is "sounds which *distract* . . . ." (p. 101). *"Physical contact or destruction" is "contact which is unacceptable"* (p. 102). Intepretation of the terms underlined requires a value judgment by the observer.

Records of the incidence of behavior patterns to which such inferential judgments have been applied should always be somewhat suspect because any inference reduces interobserver reliability; that is, two observers usually will agree about the times they hear a student speak to a classmate but sometimes will disagree about whether the verbalization was "positive" or "negative" in intent.

The Pupil Observation Schedule (POS), a procedure developed by this author (Wood, 1973), has several categories that require observers to infer whether a student's intent is positive or negative. The POS permits recording the occurrence of 13 categories of student behavior by 30 second intervals. The observer makes a check mark in the cell for each 30 seconds whenever a behavior pattern occurs one or more times during that interval. This method results in some loss of data, as illustrated previously, but after several observation sessions a satisfactorily complete picture of student behavior can be obtained. With this type of system, it is customary to summarize the observations as percentages (number of intervals in which a behavior was observed to occur/total number of intervals in the observation session). The percentages have been calculated on the illustrative POS form (see Figure 3) which shows the record for a 10 minute observation session of twenty 30 second intervals.

The first four categories of behavior recorded on the POS can be objectively defined: "on task," "at place," "object noise," and "vocal noise." ("Off Task" is included so that the observer always will have to mark a student as "on" or "off task," thus marking off an interval even if no other activity is observed.) "Nonresponse" to a behavior initiated by another is also a category that requires little inference from an observer. But "self initiated verbalization," "responding verbalization" "gesture," and "physical contact" must be judged either "positive" or "negative" in intent. Some objectivity of recording has been sacrificed in the interest of making the record more useful.

Skill in the use of the POS takes only a little practice. The procedure requires the observer to be free of other responsibilities, however. It has been used successfully by resource or consulting teachers as part of their assessments of problem behavior in regular classrooms (Rardin, 1976). Rardin supplemented the pupil categories by adding five categories of teacher behavior: control, organize, discuss, demonstrate, and describe. She also provided space for recording if the teacher attends positively, negatively, or not at all to the target student during each interval.

Teachers seem to find the information recorded on the POS and similar schedule useful in helping them to think about strategies for managing problem behavior.

The POS provides a more complete and continuous record of observed behavior than the Behavioral Objectives Sequence, but in itself lacks the definite implications for instruction that the Behavioral Objective Sequence provides. The purpose of the POS is to give a more

On task	✓|	✓|✓	✓|✓	✓|	✓|✓	✓|✓	✓|	✓|✓	✓|✓	✓|✓	85%
Off task	|✓	|	|	|✓	|	|	|✓	|	|	|	15%
At desk	✓|✓	✓|✓	✓|✓	✓|✓	✓|✓	✓|✓	✓|✓	✓|✓	✓|✓	✓|✓	100%
Away from desk	|	|	|	|	|	|	|	|	|	|	0%
Object generated noise	|	|	|	|	|	|	|	|	|	|	0%
Vocally generated noise	|	|	|	|✓	|	|	|	|	|	|	5%
Positive self initiated verbalization	|	|	|✓	|	|	|	|	|	|	|	0%
Positive responding verbalization	|	|	|	|✓	|✓	✓|	|	|	|	|	15%
Positive gesture or expression	|	|	|	|	✓|	|	|	|	|	|	5%
Positive physical contact	|	|	|	|	|	|	|	|	|	|	0%
Refuses interaction	|	|	|	|	|	|	|	|	|	|	0%
Negative self initiated verbalization	|	|	|	|	|	|	|✓	|	|	|	5%
Negative responding verbalization	|	|	|	|	|	|	|	|	|	|	0%
Negative gesture or expression	|	|	|	|	|	|	|	|	|	|	0%
Negative physical contact	|	|	|	|	|	|	|	|	|	|	0%

Time: 10:15 - 10:25 a.m.

Activity: Arithmetic period. Teacher is demonstrating problem solutions at chalkboard. Students are volunteering answers and responding to teacher questions.

Date: 12/3/78

Room: 203 - Grade 5 - Mr. B.

Student: C.N. - Age 11-4

FIGURE 3: Pupil Observation Schedule (Wood, 1973).

global picture of the student's functioning preliminary to focusing in on specific behavior patterns of interest. The POS record covers a wider range of behavior than the Deno/Mirkin four category procedure and includes a record of positive as well as negative behavior. However, it requires somewhat more skill from the observer and cannot be used by a teacher who is simultaneously carrying on instruction. By now, it should be clear that "observation" can be shaped to fit one's needs, skill level, and time schedule.

ADDITIONAL DATA THAT MAKES THE OBSERVATION RECORD MORE USEFUL

When it is applied by a practiced observer (Schoggen, 1964), the narrative record procedure produces a very complete record of behavior in context that is relatively unbiased by preconceived categories. Description can be kept well separated from inference most of the time although it would be false to claim that subtle observer biases do not influence what goes into the record. However, the full narrative procedure is difficult and time consuming to use, and a narrative record is not necessarily the most useful kind of observation record for the teacher. How can one restore, to the observation record, as much as possible of the context captured in a complete narrative record?

The first step is to prepare a brief narrative description of the classroom environment, the activity being carried on, and the characteristics of the students and teachers (i.e., age, sex, socioeconomic status, and skill levels). Observation records should be made of the behaviors of a random selection of the target student's same sex peers. A common procedure is to alternate observations of the target student and individual peers; that is, observe the target student for 5 minutes, peer one for 5 minutes, the target student again for 5 minutes, peer two for 5 minutes, and so forth. Studying such a record helps one to judge how "normal" the target student's behavior is. As already mentioned, Rardin found it helpful to include a partial record of the teacher's behavior on the POS form to add to the picture of the social behavior context of the student's behavior.

Although the addition by Rardin is a start at looking at social interaction in the classroom, the observation procedures described in this chapter have tended to focus on the individual student. Recording interaction is more difficult but, as Strain, Cooke, and Appolonni (1976) have pointed out, interaction data add much to an observation record. As an observer gains in skill, he or she finds ways to add important notes on social interaction to the record by annotation or modification of the form being used.

USING OBSERVATION RECORDS

A variety of procedures to guide observation and make a record of what is observed have been described in this chapter. How does a teacher decide which procedure is most appropriate for a specific purpose? Some teachers may prefer to adapt the same basic procedure to meet every need, but in general, it is better to master several different approaches so as to have a range of choices when seeking for the "best fit." Here are some possibilities.

Screening and Initial Assessment

Observation is an important tool for use in answering the first question to be considered when a teacher begins to be "disturbed" by a student's behavior: How specifically can the disturbing behavior be described? Careful description must precede decisions about when and how to intervene. Brief narrative notes taken after the occurrence of "critical incidents" can be of help in pinpointing the problem, but early use of the Deno/Mirkin "four category" procedure or some form of the Pupil Observation Schedule will provide data on "typical" as well as problem behavior. Both should be considered. Use of these procedures can and probably should be relatively informal at this stage.

After teachers begin to feel more certain about what the behavior is that disturbs them, the next important question can be addressed: Is the behavior sufficiently disturbing to the student, the group, or the teacher to warrant planful intervention? Most problems will respond to good classroom management procedures; many are transient and seem to be "outgrown" without special attention. Is the teacher certain this is one of the small number that requires a special plan? If, a decision is made to proceed to a more formal assessment, prior parental permission must be sought and other due process requirements observed.

Formal Assessment and the Development of the IEP

The systematic observation procedures that have been described here are appropriate for use at this stage of the intervention process as well. But, now, procedures such as the Developmental Therapy Objectives Rating Form (DTORF) and Behavioral Objectives Sequence (BOS) become particularly useful. Too often teachers wait to use these procedures until the student has been placed in a special setting. Since the relationship between changes in settings and changes in behavior is well known, it would seem appropriate to rate a student's behavior on such scales in the situation where the problem was first observed as well as later, in new or different situations. Such a "double baseline" provides both a helpful summary of the student's original status and appropriate objectives for the early stages of intervention when a detailed plan has not been worked out.

Monitor Progress

Several methods for obtaining frequent independent observations of pupil behavior have been described earlier. Data from such observations can be readily summarized on charts or graphs (Deno & Mirkin, 1977). Thus summarized, the data permit ongoing evaluation of the interventions introduced to guide the social development of the target student and provide the basis for thoughtful program decisions. Such use is described by Deno and Mirkin (1977) as "data based program modification."

Determining What to Change When Progress Does not Occur

Intervention plans are usually focused on a small range of student behavior, for example, being on task or responding appropriately to social greetings by others. By thus narrowing the focus, teachers tend to lose sight of the "total person." While one response to a student's lack of progress may be to change the intervention plan while continuing to focus on the target behaviors, another might be to take a step back, and look at the student's behavior more generally, as in the earliest stages of assessment. Focusing on targets or objectives from the DTORF or BOS lists may be preventing teachers from noticing that an individual student might respond better if approached in a completely different manner. Going back to the use of a general observation procedure like the POS may help teachers to reorient themselves and develop new plans that are a better fit than the old.

Evaluation

The advantages of using charts and graphs to summarize observation data have already been mentioned in the discussion of methods for monitoring progress. Such data summaries can also be useful for purposes of program or individual progress evaluation. Data from DTORF or BOS type sequences can be summarized in terms of specific objectives mastered by individual students or number of objectives mastered by a group during a specified time period. In the present period of tight education budgets, the teacher or program director who can present such data to explain and justify a program gets a positive response from program review boards.

Special Situations

This discussion of observation procedures to be used for specific purposes has stressed systematic interval recording and hierarchical checklists as more useful than narrative records for the classroom teacher. However, some special educators work in situations where narrative records are used by others and they are expected to comment on them, for example, hearing in court proceedings or welfare actions. In reviewing the reports of others, teachers should keep in mind the comments about the strengths and weaknesses of such narratives. In making their own presentations, they should be ready to explain why the procedures they use are appropriate for educational purposes.

CONCLUSION

Salvin (1978) argued in a recent issue of the *Educational Researcher*, the opinion journal of the American Educational Research Association, that special education programs have demonstrated much greater potency as interventions fostering the development of students in part because of their attention to establishing a foundation of data gathered through systematic observation on which to base program planning and decision making. Whether the instructional program is structured according to the model set forth by Deno and Mirkin (1977), Wood (1973), Stephens (1975), Hewett and Taylor (in press), White and Haring (1976), or any of a number of other curriculum developers, its implementation should be guided by analysis of systematically collected information about student behavior.

Several years of experience have convinced me that systematic observation is the best procedure available to the teacher who wishes to gather useful information on the social behavior of students. The procedures may seem awkward and time consuming at first but, with practice, they become easier to use. However, the convincing argument is made by the observation records themselves. Good teachers find them useful enough to be worth the extra effort it may require to gather and maintain the data they contain. Good teachers are those to whom Slavin's praise is awarded.

REFERENCES

Boehm, A.E., & Weinberg, R.A. *The classroom observer: A guide for developing observation skills*. New York: Teachers College Press, Columbia University, 1977.

Braaten, S. *Behavioral objectives sequence*. Minneapolis MN: Madison School, Minneapolis Public Schools, 1977. (Unpublished. Copy available from author.)

Braaten, S. The Madison School Program: Programming for secondary level severely emotionally disturbed youth. *Behavioral Disorders*, 1979, 4(3), 153-162.

Deno, S.L., & Mirkin, P.K. *Data based program modification: An intervention program for serving handicapped students*. Minneapolis: Leadership Training Institute/Special Education, University of Minnesota, 1977. (Available from The Council for Exceptional Children, Reston, Virginia.)

Hersen, M., & Barlow, D. H. *Single case experimental design: Strategies for studying behavior change*. New York: Pergamon, 1976.

Hewett, F.M., & Taylor, F.D. *The emotionally disturbed child in the classroom* (2nd ed.) Boston: Allyn & Bacon, in press.

Quay, H.C., & Peterson, D.R. *Behavior problem checklist*. Champaign IL: Children's Research Center, University of Illinois, 1967.

Rardin, C.A. *Comparison of the utility of two classroom observation systems as diagnostic-assessment tools*. Unpublished colloquium paper. Minneapolis MN: University of Minnesota, 1976.

Schoggen, P. Mechanical aids for making specimen records of behavior. *Child Development*, 1964, *35*, 985-988.

Salvin, R.E. Basic vs. applied research: A response. *Educational Researcher*, 1978, *7*, 15-17.

Stephens, T.M. *Directive teaching of children with learning and behavioral handicaps*. Columbus OH: Charles E. Merrill, 1975.

Strain, P.S., Cooke, T.P., & Appolloni, T. *Teaching exceptional children: Assessing and modifying social behavior*. New York: Academic Press, 1976.

Walker, H.M. *Walker problem behavior identification checklist: Manual*. Los Angeles: Western Psychological Services, 1968.

Weinberg, R. A., & Wood, F. H. (Eds.), *Observation of pupils and teachers in mainstream and special education settings: Alternative Strategies*. Reston VA, The Council for Exceptional Children, 1975.

White, O.R. & Haring, N.G. *Exceptional teaching: A multi-media training package*. Columbus OH: Charles E. Merrill, 1976.

Wood, F.H. *Pupil observation schedule*. Minneapolis MN: Special Education Programs, University of Minnesota, 1973. (Unpublished. Copy available from the author.)

Wood, M.M. (Ed.) *Developmental therapy: A textbook for teachers as therapists for emotionally disturbed young children*. Baltimore MD: University Park Press, 1975.